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ABSTRACT.

This is a report on the International Schools Association (ISA) workshop which was intended as a high-level conference concerned with new educational thinking in Britain and the U.S., and also as an interdisciplinary experience for participants. The report contains summaries of talks by the principal speakers and a list of the discussion groups. Many of the speakers stressed the need for "humanness" in all educational development and made a plea for community living, respect for others, the sharing of responsibility, and the mobility of work. Others expressed the need for a greater "exactness" in the approach to learning, indicating the importance of interaction, integration, and careful evaluation of progress made. Another speaker emphasized the philosophical nature of the educational process and damanded a transfer of knowledge by students to the outside world so that they might answer their own questions about "relevance" in a practical manner. One speaker showed the importance of a properly organized school situation. Another participant spoke of the organization planning, self-questioning, and honesty required in the teaching of mathematics. Finally, one of the. participants demonstrated that "survival techniques" for education in the seventies were already being used in many schools. The report also contains an appendix which includes working and other bibliographies by some of the participants, books and sources for audiovisual methods of teaching, and commercially available curricula from the Learning Research and Development Center at the University of Pittsburgh. (BD)



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No. 76

February 1975

"WILL/YOUR TEACHING SURVIVE THE SEVENTIES?"

A REPORT ON THE INTERNATIONAL SCHOOLS ASSOCIATION FIRST TEACHERS' IN-SERVICE TRAINING WORKSHOP HELD AT THE INTERNATIONAL SCHOOL OF GENEVA, SWITZERLAND, FROM 8 - 19 JULY 1974.

"Human history becomes more and more a race between education and catastrophe."

H.G. Wells.

Introductory Statements Summaries of Talks by Principal Speakers Other Talks and Discussion Groups

Acknowledgements

Annexes

Order Form for Cassettes

The first Teachers' In-Service, Training Workshop sponsored by the ISA took place from 8 to 19 July 1974 at the International School of Geneva by kind permission of the Director-General, Dr. R.-F. Lejeune.

The Workshop was opened on behalf of UNESCO by Professor Bent Christiansen, Programme Specialist in mathematics, Division of Pre-University Science and Technology Education, who later in the Workshop gave a talk to the participants on Problems in the Teaching of Mathematics.

There followed a reception to which were invited, as well as the participants, co-workers in the field of international education and friends of ISA.

Some fifty participants attended the Workshop from seventeen countries. Observers came from the International Bureau of Education, the International Baccalaureate Office, the Universities of Geneva and Lausanne and the American Women's Club of Geneva. The 'Times Educational Supplement' had two correspondents at the Workshop.

The theme of the Workshop was: 'Will' your teaching survive the seventies?'

The Workshop was intended as a high-level conference concerned with new educational thinking in Britain and the United States, and also as an interdisciplinary experience for the participants.



Extract from what the compiler of the Report said about the preparation of the Workshop:

"Quite a long time ago now I suddenly found myself preparing for a Workshop in Geneva. I began to like the idea. Perhaps I could realize a dream. What kind of workshop? I thought of people who might speak at it. I began to write to speakers and ask them to come. I thought of a historian who had written one of the most significant books of our time, but I also knew that he had another interest which consumed him like a passion - ornithology, the shape and flight of birds in strange corners of the earth. He could not come because the time of our workshop was the time-when he would be with his birds, and would turn off for a week or two his dreadful communication with our tormented world, I thought about a man who had written against oppression, and about present-day Britain. and a re-born Europe. But he was called to the United States to cover a darkening problem for his newspaper. I wrote to scientists until I found JEFF THOMPSON in Oxford. I thought of Bob Glaser at the University of Pittsburgh whom I had met some years ago at a conference in Bulgaria. I remembered him as gentle and kind and compassionate, believing in what his teaching machines could do. He sent me his co-director, BILL COOLEY. It was fascinating to think what the speakers might look like - from their letters - those from @ the heart of the Rupert Brooke countryside in Cambridgeshire which DAVID HOLBROOK wrote. He kindly suggested other speakers to me. I began to read 'Towards Deep Subjectivity' so that I could say that I had read his book when I wrote to the deep-thinking ROGER POOLE. I wrote to George Steiner because I thought I had him trapped since he was coming to teach at the University of Geneva. But I did not mariage to trap him. I knew that PETER LOMAS must come because his address was so lovely - Lynwood, June Lane, Midhurst, Sussex. Right in the north of England, in the country of moorland and dark houses that children draw, in Yorkshire, there was, a man, GRAHAM CAREY, who worked with his hands and had a dream of how we could live together with dignity and love. He was going to come to the Workshop. There was ALEC PETERSON, whom I had known for a long time, and whose determination and vision I knew the Workshop needed. There was JOAN DEAN. From her letters I did guess that she was competent and sure and nice to look at And then I went across the Atlantic again and corresponded with CHARLES MERRIFIELD whose letters back to me probed what the workshop was all about, and I tried to help him. I could never know until he came to us how much he would give to me in the daily running of the Workshop."



There is no doubt that participants accepted the Workshop as an interdisciplinary experience. But there was probably not a sufficiently urgent reaction to the theme of the Workshop - "Will your teaching survive the seventies?"

The speakers tried to be interdisciplinary in their approach, and to draw attention to the urgency of the educational problem which we have with us in 1974.

David Holbrook, Roger Poole and Peter Lomas stressed the need for 'humanness' - a subjectivity approach in the face of objective authoritarianism - in all educational development. Holbrook and Poole were also concerned about the reverse side of the subjectivity coin as expressed in pornography and cultural nihilism. Holbrook, with wonderful success, used poems, whether the work of children or established poets, to illustrate and determine his ideas.

Graham Carey made his plea for community living, respect for others, the sharing of responsibility, and the nobility of work.

Bill Cooley and Jeff Thompson felt the need for a greater 'exactness' in the approach to learning, indicating the importance of interaction, integration and careful evaluation of progress made. Cooley was particularly successful in showing that the further away from the individual we taught the less the known achievement would be. He had difficulty, however, in preventing participants from thinking that he was offering only 'machines' for the purpose of teaching.

Charles Merrifield, like Poole, emphasized the philosophical nature of the educational process, and demanded, as did Cooley, a transfer of knowledge by students to the outside world so that they might answer their own questions about relevance in a practical manner. Merrifield condemned, without hesitation, the traditional authoritarian curriculum.

Joan Dean, although deliberately at the Workshop trying to involve primary teachers, showed the extreme importance of a properly organized school situation, developing such themes as the correct use of stime, grouping of children in the teaching process, the proper involvement of the 'professionalism' of the teacher, and the vital theme of motivation.

Ben Christiansen spoke of the organization planning, self-



questioning and honesty required in the teaching of mathematics, pointing out very clearly what is valuable and what is not.

Finally, Alec Peterson's talks, while including much of what Cooley and Merrifield in particular were saying, were based on two very substantial foundations - vast experience and the bold and imaginative syllabus of the International Baccalaureate - so that participants could see that 'survival techniques' for the education of the seventies were already into the classrooms of a widening number of schools.

The compiler of this report has decided to offer his summaries of the speakers' talks as they came over to audiences, subjectively, and not as pure transcriptions, objectively. The complete talks of the speakers will be available as cassettes. The dompiler, therefore, accepts full responsibility for any errors of judgement or accuracy which may become apparent in his summaries.

SUMMARIES OF TALKS BY SPEAKERS:

A) Opening of Workshop by Professor Bent Christiansen of UNESCO.

The vitality of international co-operation;
Co-operation through books and reports. Reading what other people are doing in education
The need for international meetings
Personal interaction by seminars, symposia, openended reports
The necessity to study abroad
Activities which mean for a teacher work in another country
In a workshop the need for discussion between person and person
Small groups talking about world-wide issues
The real experience is the work in another country

"Culture is the passion for sweetness and light, and, what is more, the passion for making them prevail."

Matthew Arnold.

B) Children's Writing
by Mr. David Holbrook of Downing
College, Cambridge University.

Mr. Holbrook developed the themes of all his four talks through the reading of poetry, an original and highly stimulating method of presentation.

Contrast between creative energies of children and the false solutions(nihilistic)



A dehumanized society A commercial and brutalized exploitation of children by the newsreels and other media Egotistical nothingness Purely hedonistic approach - what can I get out of it? The dynamics of hate, whereas love is creativity The child's search for a sense of existence - an awareness What am I? Why am I here? I am afraid The need for a true existentialism The theories of Rollo May, etc. The anonymity of living among concrete buildings Culture at large is nihilistic We must assert 'humanness' Martin Buber says we do not live in world like animals We have imagination which sets us out of ourselves Between human beings there must be confirmation and inter-action D.W. Winnicott says that the primary need for man is to find meaning (not just sex as with Freud) Mother and child relationship is closer than instinct Mother, replaced perhaps by teddy-bear, points towards culture Teddy-bear symbol is both union and separateness Becomes a rich personal culture, 'humanness' and union with other humans What is the point of life? What does 'I'? Roger Poole says culture is a primary need of man But it is inaccessible to objective attitudes Children produce their own symbols when they write poetry Teacher-child relationship must be like a mother-child relationship We need the capacity to understand other people and to enter into the lives of others We cannot 'live' from package-sensation to packagesensation Again the questions: What is to be human? What is the point of life? Crime is associated with literacy failure

The child needs fun, not the new phenomenon of 'ripping bodies open'
The failure to recognize the imagination ('Black Paper' against 'messing about' in education)

C) The Need for Subjective Disciplines by Mr. David Holbrook.

Science itself is not clear about subjective and objective situation Empirical psychology is not working (in the Cartesian fashion) You are asking, for example, what is the symbolism of the monkey's behaviour - just like the symbolism of the child's poem It is not just measurement, but an imaginative assessment - anthropomorphic This rejects the rational scientific tradition Marjorie Grene says if you have the parts you have the whole It is a question of divide and conquer But behavior is not in parts, it is a whole Categories of living cannot be learned in the Cartesian tradition So there is a crisis in present-day scientific thinking There is no body of objective knowledge, only scientists knowing, persons knowing - always subjectivity, not objectivity It is a question of dwelling in the mathematical structure An extension into the things beyond The relationship between self and the world is far more complex than simple. Living creatures are living in the world We have 'intentionality'; not a passive reception of stimuli (The dragonfly moves)



Buber says we live in a mansion of the consciousness It is a creatively complex situation Creative imagination shapes the kind we are You cannot reduce life to inertia which is not life The obscuring of the creative forward-looking elements Roger Poole: we confer meaning on the world, and do not have meaning thrust upon us It is a world of interacting subjectivity Massive re-integrating of subjectivity into objective research . . We must recognize the irrational Subjective qualities needed in research ('We will bury you' says the scientist to the poet) a-Existentialism is needed to put back man as a whole It is a question of going more deeply into the nature of man in the world Not just learning fragmentary subjects, but discussing man as a whole Wedding the disciplines into a whole The specialist makes an exclusive claim Biologism Nihilism which debases what is human in man Man seen as a thing made of drives, forces, etc. not an organism only Culture-bearing animal is man, unlike other animals Not an agglomeration of functions is man Not a functionalized world An increasingly inhuman@social order The sadness of pictures of functional (sexual) man (sex education films) Love, uniqueness, meaning, etc., are obliferated. Produces a scepticism A terrible 'real-politik' Impersonal science must be against the personal In the arts - not as in the 'naked ape' - man has an impulse towards a higher being Science undermines man's moral being Evolution etc. and energy theories where annihilation is the only hope (Man is 'a bag of bones' as in Ted Hughes 'Crow') An inert, unresponsible environment where man is abandoned Man.frightened by his own shadow - the light of the



mind of man makes the universe
(Prospero's dream-world of man's culture)
Hate (Sylvia Plath) and meaninglessness
We must recognize that the heavenly bread is
passed from man to man
(Also in Hughes there is intentionality)
Universe can be humanized.
Intentionality and the creative giving of meaning
Why did Hughes give himself up to the cynicism of 'Crow'?
Children in schools have no training in the study of
babyhood
(See Coleridge's 'Frost at Midnight')
PHILOSOPHICAL ANTHROPOLOGY

"Poetry is as exact a science as geometry." Gustave Flaungrt.

D) Cultural Pollution

by Mr. David Holbrook.

The situation is very grave There is a refusal by people to be concerned Trying to be objective, not being concerned with what is happening in consciousness The film: 'A Clockwork Orange' described as a marvellous experience But otherwise described as a militant and malicious assault on human values As with terrorism - the willingness to maim women and children A distortion of love A fantasy and symbolism in this Back to the Nazi theories of the thirties A media to corrupt values It is our business to protect cultural values The predominance of a mass culture



Pornography has been described as a hatred of man It is all the pollution of the cultural environment Look nowadays at every cinema in England and Europe (Once again the Love/Hate moral inversion) The problem of the vulnerability of the human being Disturbed people, anxiety, blankness, 'blousons noirs', 'Hell's Angels', etc. 5000 HP men: cf. the terrorist The spread of pornography under a guise of enlightenment Milton: 'Hate stronger under the show of love well-feigned' Hate now at the centre of sexual meaning A child's expression of nihilism Desperate obsession with 'blood and guts' - the adolescent schizoid (sullied flesh of Hamlet) The destruction of nihilism This element comes from the anxiety of nothingness Boredom, fear and anxiety Exploitation of fear and anxiety Poems of children express the problem The present human predicament leading to envy of the dead and the insane Magazines like 'Mayfair' etc., films like 'Straw Dogs', 'A Clockwork Orange', 'Last Tango in Paris' etc. Rape, combat, murder A world of false solutions To insult the body is to insult the freedom within it The destruction of the creative being in love And the depersonalization of sex When parents describe certain 'pop' singers as 'filthy swine! children turn against the parents It is the world of the 'New'Hun' (Roger Poole) See 'Crow' by Ted Hughes (a functional view of sexual intercourse as in his poem 'A Childish Prank.') In 'Last Tango' sodomy = destructive nihilism, cultural nihilism It is the morality of the SS in Nazi Germany Pornographers try to confuse human beings by sexual displays as in Solzhenitsyn's 'Gulag Archipelago.' The tremendous amount of money involved in the dissemination of pornography We must control the nihilists because people are only

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too willing to join in the nihilism

We must reject the sexual fascism of the pornographer who is also a hypocrite

Finally, there is the very real danger of a mass-cosmopolitan culture destroying a local, native culture.

E) The Poetry of Sylvia Plath by Mr. David Holbrook.

The poem: 'The Night Dances' A very difficult poem What is it about? About a baby Winnicott says there is no such think as a baby only a baby with a mother (reflecting an emerging psyche) Sylvia Plath is opening up this study The mystery and complexity of the baby The puzzle of the baby Baby is sending out gestures The rippling movements of the baby - the night dances How do you receive the gestures of the baby? The poet is puzzled about human interaction 'A smile from somebody who loves us' Night dances - mathematical abstractions (cf. Coleridge's experience in 'Frost at Midnight') The baby's is a psychic growth Schizoid emptyingness of gestures 'Nowhere' - failure of creative process Strange, sad feeling of a baby as a responsibility The poem: 'You're' Full of play But author of poetry full of nihilism The poem: 'Lady Lazarus' A hymn to suicide The poem: 'Daddy' Written not long before she committed suicide

Hatred of 'daddy': what is this hate? Hatred of falsehood Feeling of a lack of confidence in one's identity Powerful seductive dynamic of false religion (self) Associated with Sylvia Plath is the idea of suicide The poem: 'Edge' Kill her children and turn them back into her body Seductive nihilism The anguish of creative reflection Everywhere she is looking for the mother's eyes It is a failure of a female element There are bits of male symbols in her poetry The poem: 'Elm' 'This dark thing that sleeps in me' (baby) Remember the schizoid suicide does not want to die The same image in Dylan Thomas The idea of being re-born, not remaining dead A new beginning The poem: 'Poem for a Birthday' In a psychiatric ward 'Blackberry stems' = electric wires Poem: 'Dark House' Puppy-like creatures The poem: 'Maenad' The old man = 'Daddy' She could not identify with her mother (2) took an image of daddy Poem: 'The Beast' The creature is oneself that goes on living Poem: 'The Stones' Coming back to life after a suicide attempt All this poetry is a 'mad experience' The comparison with Dylan Thomas of whom Sylvia Plath was very fond: Thomas's fears as shown in his poem: 'Fern Hill' - 'the owls were bearing the farms away' and in the poem: 'Do not go gentle into that, good night' Dylan Thomas: 'I want to return to the Garden of Eden' to be reborn Sylvia Plath wrote about our time, but vision rooted in her subjectivity Great care must be taken in teaching her poetry to

students

They are seduced by Mihilistic 'avant-garde' fashions. Students are able to identify with her state of mind in resolving their own problems. Some students have had the same feelings as she had Sylvia Plath's need to be reborn is her problem deep within herself. The parallel cases of Sylvia Plath and Virginia Woolf. Both of them treated for their mental illnesses by men psychiatrists. This male influence upset them more. The danger of Sylvia Plath's poetry being taught by non-experts. The moral inversion of love and hate (see Michael Polanyi: 'Knowing and Being')

"Mathematics possesses not only truth, but supreme beauty - a beauty cold and austere, like that of sculpture."

Bertrand Russell

F) Problems in the Teaching of Mathematics by Professor Bent Christiansen.

Introductory remarks on value judgements.
What do 'we' want? Who are the 'we' in that question?
What do 'we' mean by 'good', 'bad', 'better', 'worse'?
Are there basic human needs? And, accordingly, basic values, basic problems, and basic aims?
What are ther relationships between national values and such 'basic' values?
'Answers to', or maybe better, 'reflections on' such questions are necessary as a background for answers to many of the following questions:

- 1. What is mathematics?
- 2. What is mathematics education?
- 3. The teacher's involvement in curriculum development
- 4. The tools of the mathematics teacher
- 5. New mathematics?



- 1. What is mathematics?
- a) Epistemological considerations: Mathematics as a means for description
- b) Is mathematics, taken in this sense, different from other descriptive systems (e.g. from those belonging to Physics, History, Literature, Religion)?
- c) Are value-judgements involved in the 'definition' of the various subjects? To the same degree?
- d). The universality of pure mathematics at scientific level.
- e) Creation and application of mathematics
- f) The box of contemporary mathematics at scientific level:

Foundation of mathematics

Applied mathematics

Pure mathematics

Epistemology of mathematics

History of mathematics

- 2. What is mathematics education?
- d) The transfer of knowledge, skills and attitudes as preconceived to the learner?
- b) Which parts of the body of contemporary mathematics should be brought to the attention of the learners at the various educational levels?

 Is there a universal answer?
- c) And in greater detail in some national context:

 What are in the present socio-economic context of this country the mathematical topics to be dealt with, the knowledge, the skills, and the attitudes to be conveyed at each level?
- d) A common problem area:
- To identify goals, to specify derived objectives
 To plan and organize the implementation, i.e. to decide
 on means to be applied to attain goals and objectives
 To execute the plans,

To make appropriate adjustments and changes
To evaluate

- e) Trends regarding goals
- f) Trends regarding contents

 A core curriculum (in the broad sense)

 For all? For which levels or groups?

 Basic demands on mathematics achievements

 Rôle of tests and examinations
- g) Trends regarding methods
 Change of emphasis from teaching to learning,
 from teacher to learner. Interaction between teacher
 and learner
 Utilization of theories on concept formation (concrete
 approaches, principles of variation, principle of
 contrast, multiple embodiment, deep-end principle,
 spiral organization, stages in development, indirect approaches, representational forms, discussion of language, etc.)
 Individualization
 Group work
 Discovery method
- 3. The teacher's involvement in curriculum development
- a) The rôle of the mathematics teacher
- b) Mathematics instruction, teaching education What are the decisions of the teacher in each rôle? His responsibilities?
- c) Consciousness of decisions desirable?
- d) The teacher as curriculum developer?

Objectives for course or unit in question

Expository teaching

Background in the broad sense

Identification of derived objectives
Organization of subject matter and planning of details

regarding all activities
Execution of the plans
Evaluation
Adjustment

4. The tools of the mathematics teacher

a) Knowledge, insight and experience regarding:

Mathematics (see box of 1 f)

Psychology, pedagogy, didactics (seen in the context of mathematics education)

Teaching materials in the broad sense

Working methods (types of activities for teachers and learners)

Analyses of goals/means, relationships regarding main topics of mathematics and mathematics education

Procedures of evaluation

- b) Expertise in interaction with learners (e.g. built on professional experiences and on applications of theories regarding learning, cf. 2 g)
- 5. New mathematics
- a) New terminology
- b) New content
- c) New methods

(NOTE: The views expressed by the speaker, the selection of facts presented and the opinions stated with regard to the facts are the responsibility of the speaker, and do not necessarily represent the views of UNESCO)

"I have taken all knowledge to be my province.."

Francis Bacon.

G) The Theory of Knowledge Course in the International Baccalaureate

by Mr. A.D.C. Peterson,

Director General, International
Baccalaureate Office.

Suitable for upper secondary education
Not concerned with an examination
General education essential at the upper secondary
level
Job-oriented education is not enough

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It is a question of enjoying one's environment and making sense of the world in which we live Threat of the environment can be overcome with a sense of it

We must also be able to modify our environment (Marx said: it was not enough to understand the world but to change it)

Also to enjoy the environment (Christian approach)
Certain kinds of understanding necessary for this
(theories of Hirst, Whitfield, Bell)

It is not a question of accumulation of information (as in 19 c.)

(You must have in the IB a creative activity as well as a practical curriculum which is not entirely general. You must study mathematics, language, study of man and science)

Purposes of Theory of Knowledge course - answers student's complaint that his studies are not related to each other, or to life outside school or to what happens to student after he leaves school - the teacher does not say why he studies a certain subject - what do I study history for? What has it got to do with me?

The course is intended to lead students to reflect on what they are learning e.g. science students ' who do not know what the scientist is really about The question of the relationship between moral and aesthetic judgements

Students do not understand the nature of the evidence on which man bases his judgement. The specialist in a subject is often so keen on subject that he does not realize that the student does not understand the nature of his subject. Another purpose: Transfer of training, are they going to be different people at the end of the course? Facts are not important (e, g. in history), it is the interpretation of experience that matters. How are the school subjects going to help people to understand the world?

The Theory of Knowledge course will make students more conscious of the nature of the subjects they are studying

A good deal of what a child learns is in school,



but he is also considerably affected by things outside

It is a question of transfer of what a student learns in school to what student has to deal with outside school

Extreme difficulty of teaching the Theory of Know-

ledge course Teachers who have become involved have become very enthusiastic

In some schools the students regard it as the most

important course they have One teacher or team of teachers? If one, what

sort of one? Philosopher?

Probably best taught by team; mathematician, historian, scientist and a co-ordinator who is a) an enthusiast and b) has had some philosophical

training

Should it be taught continuously or in blocks?
Two periods per week? Three weeks induction course? Month in middle of IB course? At end of IB course?

Lecture? Seminar? Problem-solving?
Course should contain real life problems
Course should not be too academic, nor too
academic in its standard! Theory of Knowledge!

is it the best name for the course?

H) Integrated Courses in the Humanities .
by Mr. A.D.C. Peterson.

What subjects are children being taught?
Nature study, scientific research/general science/
chemistry or physics or biology/botany/zoology
Aim should not be the education of scholars since
the great majority are not going to be scholars
For most secondary pupils scholarship is not
required

Life's problems are not solved by academic principles

Hence the need for interdisciplinary systems These should begin in the 16-19 age-group after the rudiments of ordinary subject teaching have been dealt with Statistics will be involved in an interdisciplinary programme so that mathematical training is needed first Up till recently we assumed that higher education was always going to be tertiary But this is changing. A high proportion of students do not apply for university education any more For an increasing number of young people 16-19 age-range will be the final years of study Therefore this age-group is the time for interdisciplinary course e.g. Arabic Studies, Eastern European Studies, Languages, etc. The vital importance of transfer of training which will lead to a link-up with the world outside school In the Humanities: an interdisciplinary course in addition to one course in a single subject An interdisciplinary course is not enough on its own Just combining courses is not enough, e.g. Physics and German Literature An interdisciplinary course requires action as well as study And the educational planning must be related to the modification of the environment Example: The IB. 'Culture of Cities' Course Very fitting for the peculiar environment experience of students who attend international schools Course draws on Geography, History, Economics, Social Anthropology, Psychology Student studies three cities: His own and 2 from a) ancient centre of culture, b) 19 c. industrial city, c) new city in developing region, Lagos, Teheran, etc. Practical work is within your own city Student in each city prepares learning material . about his own city which is sent to co-operating city (e.g. Geneva and Teheran)

A student from a third city studies both Geneva

Methods of study: a) Normal way through books



and Teheran

b).Direct contact with the environment c) Understanding by correspondence (The importance of Correspondence Courses Life-long education is the new idea in Europe -Faure Report - therefore more correspondence courses The Open University was a major development in Britain and is a correspondence course) Therefore there is now started correspondence instruction between the international schools in Geneva and Teherah. The United Nations International School in New York has an integrated course in 20 c. History and Literature The course is based on literature and history of Europe in 20 c. through the study of lite ature, also history with geography Such courses are a great improvement on the enforced clash between Science and Humanities/Arts which has been the practice in Britain.

I) The Concurrence of Aim in Psychotherapy and Education

by Dr. Peter Lomas, Psychotherapist,
Sussex.

(It should be noted that there is significant relationship between the talks given by Peter Lomas, Roger Poole and David Helbrook although their talks are not, in fact, set down side by side in the report)

Although parents are best for bringing up their own children additional help is needed Aim of psychotherapy is to help the child to fulfil his talent and potentialities

A great similarity between psychotherapy, and education

True growth. What constitutes growth?

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Are we teaching children the things they need? Are we teaching them to adapt to situations which will not develop their true potential? We must create the social being Shameful neglect of children Failure of society to interest itself in the actual world of the child (see David Holbrook) Good books are better than poor teachers Creating adults in a technological world We are not giving the child the tools he needs Miracle of dedication to reach the inner world of the child in the face of large classes in schools Guidance experts are very much in short supply Also a great shortage of psychotherapists The real problem is the sense of failure in the child (Piaget) The terrible pressures of reward, and punishment In order to overcome the sense of failure the child will adopt the false standards of others FALSE GROWTH Adults do not care enough The child brings his most precious thing to school' just to have it with him The child may be unhappy at his desk, in his classroom In school he finds himself just the same as every body, as everything else His true self has died He is already losing the battle of life Because there is a taboo about failure The fear of failure destroys the personal identity Difference between psychotherapy and education one is healing, the other is the imparting of knowledge Our social culture in which our children grow or fail to grow What is the assessment of the provision we make for.our children? Surely the best of ourselves goes into our children

After all, adults will give their lives for their



children ·

"You're not a man, you're a machine."
George Bernard Shaw.

J) Current Research and Development in Individualized Instruction

by Professor William Cooley, Co-director,

Learning, Research and
Development Centre,
University of Pittsburgh.

What is individualized instruction? It is really small group work, involving about half the class But careful planning must be done The development of the perceptual motor skills by meeting the individual needs A great deal of laboratory work and the collection Using an open classroom system but highly structured Teaching self-management skills Not only programmes but much branching The rôle of teacher in the classroom is a kind of travelling 'Hardware' is needed - computers, which are now much cheaper Children are happy doing this kind of work This is the use of educational technology - not hardware only It is applied psychological science Psychological knowledge in the past not relevant. Instructional systems were not available Each teacher does not have to be an expert, but instructional systems are essential There is the subject matter and the response of the children to it Students must interact with the subject matter There must be a display of the subject matter, manipulation and display are necessary And feed-back is essential Display means how subject matter is presented.

Manipulation is teaching strategy We must create an educational environment Programme tests do not always take account of environment * There must be a) incorporation of the learning process and b) evaluation of the learning (in Pittsburgh two state schools are operated. by this system) Task analysis: what a good reader actually does There must be learning hierarchies: information about initial placement: the principle of reinforcement Motivational variables: conditions under which learning occurs Retention and transfer Concept learning. Attention Individualization: classroom to individual There is the student's ability to learn to learn Teachers must feel they are involved in the standardization of the learning process The diagnosis of a learning structure It must be a self-improving system Computers control the environment, not the student, in his environment But all this process must be evaluated

K) The Evaluation of Educational Change by Professor William Cooley

The evaluation of programmes
To provide instructional materials for teachers
In 1968 was carried out a first investigation of
innovation
From innovation to evaluation
Have we got the evaluators?
There has to be the assessment of the inequality
of educational opportunity
Differences between schools do not reflect the
differences between students



Amongst 100,000 students tested the difference between schools did not reflect the differences in what children learned (tests of literacy, income groups, prison inmates) Evaluation is an extraordinarily difficult task Some techniques in the testing of scientific hypothesis It was found that there were some 648 ways in which an evaluation can go wrong a) outcome measures b) a dialogue between consumer and evaluator c) identification of criteria measures with what consumer wants d) evaluation of individual instruction e) identification of the relevance of a programme e.g. 'Head Start' pre-school will move children out of poverty What is the learning in relation to the end-result in jobs? School versus Post-School performance Better than IQ is General Intellectual Development Or General Academic Ability There must be shown a relationship between measurements and success and satisfaction after school The establishment of the validity of measures of children's abilities and their relationship to adult success It is easy to see impact of different educational programmes The identification of the desirable properties of education with what happens after school. It is a question of in-school and after-school What is the variety of application of new programmes? How rarely does the implementation of impovation ever .occur? There is also the measurement of variation from classroom to classroom What factors measure school achievement? Initial status, outcome at the end of a year For instance, four classrooms began with the same general initial ability End-of-year results depended on: measures of

classroom differences and the explanation of why students ended with different achievements Amount of change which occurs is dependent on: a) amount of opportunity to try out what is being achieved b) amount of motivation built into the environment c) structure of the curriculum

d) structure events in the classroom, feed-back etc.

e) amount of time available to students f) the efficiency of the instruction

There are always differences in the classroom process

Use of the wrong variables instead of studying. the educational processes

If you go into a classroom you will immediately be aware of the quality of the interaction between teacher and children

Follow-through, feed-back and implementation are vital

Evaluation of a model: The transfer value to the adult world, a small number of outcome measures, the problem of dealing with varying implementation, problem of process measures with student differences Evaluation of the Pittsburgh programme: The individual programme, when properly operated, shows a grade level increase of one grade. International schools might well use individualized programmes with students with individual differences

Programmes suitable for children who come from and go to different systems

Programmes must define the quality of self-

Programmes must define the quality of self-instruction

Individualized instruction means that the teacher knows exactly the point reached by the child's learning (much better than in an ordinary classroom) Until such a system has been developed teachers have not had the information about the children they teach that they require

T.H. Huxley.



[&]quot;Science is nothing but trained and organized common sense."

- L) Trends in the Teaching of Science
 by Dr. J.J. Thompson of Oxford University
- a) Science teaching as it is in Europe at present
- b) what is going to happen in the British system
- c) in an international system e.g. the International Baccalaureate

One of the fundamental aims will be a knowledge of scientific processes

Experimentation and practical application
There is a growing participation by the teacher
in the preparation of syllabuses
Average life-time of a syllabus is 5-7 years
Britain has an integrated middle school course
in science
Individualized instruction is rare in European

Individualized instruction is rare in European science teaching

Industry is helping a great deal with the science teaching in schools

In Switzerland there is very close contact between the chemical companies and the chemistry teaching in schools

Types of assessment: written, practical and oral tests with varied use in different countries Considerable variation among countries in the time allowed and the number of questions for written papers

Oral examinations are becoming much more popular Attitude varies in the time allowed for the preparation for oral examinations

The growth of In-Service Training for the science teacher

Trends in the British system: a) more application of principles of science to everyday life b) a greater degree of experimental skills taught c) an appreciation of social and environmental effects of science Much more attention paid to what a scientist does Pupils want to see something happening Pupils must reflect the technology of the day in approaching a scientific problem

The development of intellectual skill and the lively mind

In the 11-13 age-group it is necessary to be active in the laboratory In the 13-15 age-group it is a question of learning structural ideas and theories The use of the discovery approach in the pre-13 New methods, of course, are hard on the teacher and time-consuming Integrated science 11-13 a combined science course (an integrated science course in Scotland) 13-16 three integrated science courses a) Nuffield Secondary Science for those who will not be taking examination b) Schools Council Course leading to a double O-Level of the GCE and towards systematic problem solving c) Nuffield Physical Science Project It is now possible to have an integrated course right up to the end of the secondary level instead of separate Physics and Chemistry There is now a great deal more objectivity in examination papers (multiple choice papers as used in the United States) Teacher is playing an increasing rôle in the assessment of his pupils (continuous assessment) A shift from external to internal assessment Examination papers are now much more attractive Questions which are living experiments Evaluation of achievement: a) The interest of the children b) The understanding of the children Teacher should be able to select his science from . a kind of supermarket Aims in the IB are to make science relevant and interdisciplinary. Keynote of the IB program is flexibility Science is a way of inquiry of the environment

Biology Physics Chemistry Physical Science

What the IB offers:

Scientific Studies

Marine Science
Photographic Science
Environmental Science
(Social and environmental factors)

Still more internal assessment available with the IB and with the use of films for moderation



"The Hun is at the gate!"

Rudyard Kipling

M) The Transition School-University
by Dr. Roger Poole of Nottingham University

Attitude of some students 'Young hippy in psychedelic shirt, ragged blue jeans, no footwear, subtle smile 'Caressed book like human flesh, inhabitant of a tactile world' which precedes words' A contempt implied for authors on the shelves as meaning all the same in 1974 An indictment of the 'logos' A complete loss of literary background George Steiner has written that Western literature is fading out of the reach of natural reading and is maintained only in scholarly conversation 'Lycidas is dead' The entire classical literature is disappearing over the horizon 'The student reads Milton through his feet' The student has become 'the New Hun' He is antagonistic to learning as such He puts his feet, on the table without showing any concern for other people in the room, no writing materials, writes unhesitatingly in a library book, uses any object as an ash-tray, switches off his mind as he stubs out a cigarette A book is a fetish which he keeps in a sort of 'swag-bag' It is the fascist state which upholds the literary system Al books are irrelevant It is a rejection of language, An exploration of tactile space What he can get out of the five senses 'Flower-power', he gathers tactile experience like the pollen from flowers Do not look like a medieval man, but turn your face to the sun Be a pacifist and love everybody and everything

Words make demands upon the intellect, words are works of the devil Drug experience is essential for him to induce his multi-cultural world To the 'New Hun' an hour in the classroom must seem a kind of eternity And Milton is like a bully The 'New Hun' must bear his cross But what if the 'New Hun' was right? After all, the price to pay for knowledge was disembodiment · 'Will our teaching survive the seventies?' (in a post-literate society) Gulf between teacher and taught in university and school Children of the Sixth Form who come to university / and change to the 'New Huns' The children of June are the people who arrive in September Their failure to change the model of learning: a) Teaching b) Information

- c) Note-taking (a kind of alienation)
- d) Infallibility of teacher (who becomes a man of straw)
- e) A false respect for the feacher
- f) Fear of expressing an opinion
- g) Inability to read (use Xerox instead)

But it is a mutual disappointment. Staff expect learning involvement, independent work, a high degree of verbalization, an interest in wider implications of the subject, a willingness to discuss general ideas (

But they get: students propelled into university by all sorts of self-interest, their work at school does not prepare them for university, only to get a place, they have not had any conceptual preparation, they are not prepared to take up a position with regard to some matter of consequence, they do not watch television nor do they read the papers, no interest in history, they have an inability to reflect for a long time on something, it is too egocentric to be a Union speaker

The lecture is a dying art because σ a)it is something the Gutenberg man does (Poole)

- b) you are talking to people who are largely non-verbal
- c) the lecturer must be judged
- d) by a popularity poll
- e) the lecture is élitist
- f) the audience's scepticism and 'sansculottism'.
- g) the young people are judging the old

N) Objective Ideals and Subjective Realities - the teaching of Milton and Swift.

By Dr. Roger Poole.

'Samson Agonistes' and 'Gulliver's Travels' Can you teach Milton and Swift? We can go round them Milton's conviction, but also his doubts Swift's bitterness; but also his sense of justice and reason Subjective truths, objective laid-down criticism The attitudes of the official biography of Milton and the sixth form edition of his works Parker's 'Milton' - the pious Milton who was no more than a 'traditional' misogynist' There is only the dramatic relevance of the misogynist The objective approach tells us not to believe in what is most exactly shown in the poetry Teach that Milton was the poet of faith, not someone visited by tremendous doubts !Paradisc Lost' is really an indictment of God's relations with man Milton went blind as he wrote his justification of the behaviour of the regicides We are told not to assume that 'Samson Agonistes' comes out of Milton's own experience His constant preoccupation with his blindness particularly in the great'sonnet on his blindness The schools edition tells you how you must read 'Samson'

It is temptation overcome and the acceptance of God's justice

You must move away from the poet to what authority says about the poem Milton is obviously constantly worried about

Milton is obviously constantly worried about his blindness

'Samson' has an outburst against women, expresses doubt, and complains at the injustice shown towards the regicides

The authorities forbid us to see that the Chorus in 'Samson' could represent Milton's (or Samson's) point of view - it is only the chorus. Always the objective approach by the critics. Not even subconsciously Milton's thoughts. We must not label anything autobiographical which does not occur in objective reality.

We are forbidden to accept subjective meaning Milton's first marriage caused him great suffering, but you must not assume that Milton's attack on Dalila was autobiographical

But whatever is 'traditional' misogyny? There are powerful references in 'Samson' to his own marriage

He probably took twenty-five years to write 'Samson', obviously obsessed all the time by his blindness. We must refer to the subjective life of Milton How do you teach the poem?

It was a moral and intellectual victory only, still to be achieved in 'Paradise Lost.',

The objective critics continue to stress the triumph of faith in Manoa's speech at the end (There is a farbidden area in Miltonic scholarship) The poems are surely a silent, dark struggle about the meaning of God's justice

Swift's 'Gulliver's Travels' has become almost a children's classic

Swift embodied subjectivity

Only a pious Anglican?

He suffered for much of his life from an intensely painful illness which fostered his misanthropy But he was treated by the objective critics as a madman

They saw it as impossible for him to create un-Christian, devil-like people



But we, people with reason, can be absolutely bestial (in war, in politics) Surely rational people do not do that? Swift was not driven mad by his disease, only could not remember how to speak He suffered from a deep melancholia How did it affect his vision, a man from the age of Greece? He hated the Yahoos which he created But how do you criticize this objectively? (Gulliver is taken for a Yahoo, becomes a Yahoo) How do you teachthis book? The human being is capable of a perversion of reason as is Swift's view of man (as Gulliver) > A reasoning man capable of such enormities Creature, reason, enormities, corruption, brutality where corruption is worse than brutality Corruption is Gulliver, brutality is the Yahoo 🔪 The vision of Milton and Swift was fantastic, and why do we reject them? We do not reject their vision if we look at them subjectively

O) Phenomenology (and Literature)

by 'Dr. Roger Poole.

Much of this talk is difficult. Considerable help comes from Dr. Pool's book 'Towards Deep Subjectivity' in understanding what he has to say. (Published by Allen Lane, The Penguin Press)

Subjectivity comes out of phenomenology
Dealing with the totality of phenomena
The things of the mind given unquestionably in
mental experience
Started with idealism and positivism (see Charles
Merrifield)
Links up with Berkeley



Psychology was monopolized by the object, phenomenology concerned with the thinking subject-Husserl's investigation into the problem of meaning out of mathematics The importance of 'intentionality' which confers meaning Intentionality was a new moment in thinking The act of knowing was more important than the actual knowing Rejection of Behaviourist Psychology and psychologism It was a new scrutiny of the world The creative side of perception . An act of intelligence which seeks for meaning The essence of thought Heidegger followed up Husserl with his 'Dasein'. a kind of anthropology Phenomenology moved to France with Merleau-Ponty and Sartre (existentialism) Sartre's 'Being and Nothingness' - intentionality · To project our creative view over the world To move to literature as in Sylvia Plath in her poem. 'Who' (phenomenology) Subjective method works from inside not from outside as is vital for the understanding of Sylvia Plath's poetry You see the method in David Holbrook's English in Australia Now. As in Peter Lomas's psychotherapy which is an interpersonal experience The rejection of quantification Towards the 'subjective objections to objectivity' (in Poole's book 'Towards Deep Subjectivity.') Phenomenology still not adequately historically treated

(George Steiner is also close to the ideas behind Roger Poole's thinking in his talks M) and O). See 'In Bluebeard's Castle' published by Faber.)



P) Social and Educational Philosophies. Some Curriculum Implications.

By Professor Charles Merrifield of California State University.

Will the Curriculum survive the seventies? An examination-dominated curriculum, traditional classical subject matter, skill-centred, moresreinforcing

No use as it stands at present
It is institutionalized and regurgitating; traditional
The problems of society must be faced up to:
literacy, poverty, brain-damage to young children,
unemployment, the technology of force - the
problems, in fact, of survival
Can the curriculum show relevance to these
problems?

What has made our present curriculum?

Perhaps by: a) Theory of reality

- b) Theory; of human nature .
- c) Organization of social bond
- d) Nature of progress
- e) 'Who am I?'
 - f) (Greek culture)
 - g) Theory of value

Reality? a) Idealism - outside of man, essence of ideas

We cannot grasp reality, how do we reach this kind of truth?

Intuition; revelation? Through the Bible, Koran, etc.?
b) Unequal capabilities affect our status

Human nature unequal (the élite)

The exercise of sovereignity, the doctrine of freewill, but you must be controlled Schools of philosophy: Idealists, Plato, St. Augustine, Dante, Calyin, Hegel, Kant, Emerson, Niebuhr

Positivists, Thucydides, Locke, Hume, Hobbes, Descartes

Reality is created by men for the Idealists and Positivists

Knowledge is created out of human experience

Subject-matter to make the knowledge to make experience Competitive world produces the people of power The best people are those who win We have equal ability to become unequal What is success? Plutocracy is control and manipulation Conceptualism is new: William James, etc. said that 90% of person's life is habitual (only) a small percentage is when he is making sensible Involvement of the individual is interaction Then the evaluation which means ideas which are proved up till now Principles are not laws Principles can change There is a confusion nowadays between the biological and the social Conceptualist says we are not born with traits We all learn our behaviour Culture is the way we do things We need an enlargement of the range of options = freedom There must be a constant re-construction of our society

Creative intelligence, challenging what now exists There is something other than authority We need a curriculum using biological and

cultural theories What is living?

- a) Procreation
- b) Replenishment of function
- c) Policy-making and administration
- d) Communication pointing directions, signalling intentions
- e) Social and Educational Function
- f) (Propaganda seeks to narrow choices)
- g) Function of psychic support (morale)
- h) Technological problem-solving

A curriculum for mankind which is very much alive

A, curriculum for true international citizenship

(the likeness of all mankind)

Much of what we are now teaching when re-constructed



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in a functional form could be used in a different perspective (Idealist - Holbrook: Positivist - Cooley)

Q) School Organization
by Mrs. Joan Dean, Chief Inspector of Schools,
Surrey,

Every school must do what is right for itself What things are reasonably constant in our society?

a) Process of adaptation to environment does not change much

- b) The self-image of the school
- c) The need for social conscience is constant
- d) Growth of knowledge
- e) Attitude-formation
- (Mass media and advertising much better at attitude -formation)

You need study-skills to form a framework Start looking at concepts and evidence at various

We must face up to variables and not just to

What about the hidden curriculum? Children learning what they do not get taught
What is the educated man?

- a) He has maturity and balance
- b) He can cope with major changes
- c) He is aware of the meaning of life
- d) He has a realistic image of himself
- e) He is independent
- f) Enjoys learning
- g) He can collect, classify, order, synthesize and generalize
- h) He is creative enough to deal with new ideas
- i) He has powers of communication
- j) He is interested in the arts and in craftsmanship
- k) He likes to live with and be sensitive to others

The curriculum is the whole way of life of the school Personality training more important than learning facts The importance of interaction with other people School must look out towards the community Learning from models There is also communication by movement (Moving around in different cultures may mean not picking up all the clues) There is also communication by that's and symbols The process of learning and experience Language is to be attached to first-hand experience Basic ideas of exploration of the world Building up a framework of basic ideas Teacher is giving the child pre-digested material, nowadays it is a question of the restructuring of the material by the child You must teach things which are transferable Motivation must be discussed by teachers: expectation, co-operation, praise, etc.

a) Problems produce motivation

(You must move from problem to problem)

- b) Creative behaviour is motivating
- c) So is self-correcting material
- d) Being the agent of one's own learning independent of teacher
- e) Novelty is motivating (e.g. Audio-Visual equipment)
- f) Also resolving a conflict Remember that formal teaching is appropriate at the right times ° |

Discovery learning a) Closed problem solving
b) Open-endet problem solving

For some children individual learning is better e.g. in mathematics and in reading
We do not use enough groups or pairs leading
Practice often gets left out these days, each child needs his own practice sessions

If six or less are in a group everybody has a chance to contribute



Size of groups is important Composition of groups: we are far too age-group conscious Ability grouping is clearly understood by And ability grouping is essential for some subjects - mathematics and reading There should be training for discussion Beware of team teaching hazards And of 'soft options' in the afternoon and waste of idle material and equipment It must be possible for children to have different amounts of time on a task 'Chunks' of time must be available Children must be trained to use time according to their attitudes And to work at their own time-needs Teaching a correct use of time How much can the child do without the teacher? How much is the child dependent on the teacher? Is it professional for the teacher to do things that somebody else can do? There should be a true involvement of the teacher and an opportunity for decision-making (Team teaching has produced joint problem solving) There should be time for staff development (in-service training) If you want to evaluate you must know what you are doing You must also explain to children why teachers do what they do Get children to evaluate their own work The teacher: what is professional about him? He or she must have commitment and a kind of detachment (like a doctor) Homework: children should collect information from outside school during homework time



Social terms of language
Language which you learn in schools
Teachers should have their own subject register
The reading environments how good is it?
a) Are there things that children want to talk
about?

- b) How much do children use the language?
- c) To what extent do teachers work positively to help children to improve their vocabulary?
- d) How well do children talk?
- e) Is there a school language programme?
- f) What proportion of the children are reading below their age-level?
- g) What records of reading are kept?
- h) What action is taken with children who have difficulty?

The bridge between spoken and written word must be established

Breakthrough to literacy scheme: you start off with what the child himself uses

He learns from the words of his own language Correcting the patterns of children's mistakes Why do you learn to read? Ask this question of the child

A comprehensive language programme is needed by a school

(Children who do not learn to read by the age of eight are inadanger)

Here is a check-list:

- a) Language of instruction
- b) 100 key-words to literacy
- c) Handwriting skills (they affect reading)
- d) Upper and lower cases
- e) What do children really do when they read aloud to teacher?
- f) Sonic knowledge

Left-handed writing has to be dealt with by somebody who is left-handed Self-correcting materials very useful for reading problems



"Death closes all: but something ere the end, some work of noble note, may yet be done, not unbecoming men who strove with Gods."

Lord Tennyson.

S) Proposal for a New College: A Radical
Alternative for Teacher Education
by Mr. Graham Carey of Bingley
College of Education, Yorkshire.

It is the question of the art of living together As a simple community, with a philosophy, with work to do which is both physical and academic The therapeutic effect of such a college As, for example, Black Mountain College, Ruskin College and the Bauhaus (Gropius) It is a fight against barbarism, It is bringing people together to communicate Work provided to enable people to live together To be in charge of our environment It is necessary, too, to have a clear outline of authority What makes a community? At the moment physical work is done for us by somebody else A residential life is needed for this kind of college The importance of shared responsibility The present system of colleges of education is too negative Teachers in training must be exposed to criticism a) Sharing of work b) Sharing of responsibility c) Sharing of a family experience A system of interdependence (a similar experience occurred in the building of the International School of Genevals 'Greek Theatre' by students and their teachers.) Democratic principles will evolve out of the. work carried out There is the extreme importance of academic

work taking place at the same time
There is the treasure of the craftsman
Learning the correct use of time
Time must be continuous, undisturbed and
of long duration
Feeling and intellect are interdependent
It is the idea of the 'whole man'
It has, of course, been done in religious
communities.

A talk was also given at the Workshop by Mr. Nick Carter on the building of a primary school in the nineteen-seventies, which happened to be the same building as housed the Workshop. Mr. Carter is head-master of this primary school and was able to outline to the participants how such a school is constructed when an architect is willing to consult with teachers and parents as the building rises upwards from the site and when, at a later date, feed-back comes from the children who use the new premises.

Mr. Peter Gras, Librarian of the International School of Geneva, spoke about his library which is situated in an eighteenth century property. He let his theme of 'School Libraries and Culture' grow out of an environment first inhabited by Voltaire. Culture was the respect for history, scholarship, the arts, and our fellow human, beings.

Mr. Michael Knight, Head of the Audio-Visual Department of the International School, drew the attention of participants to what is now available to teachers in the way of audio-visual equipment. (What is available is indicated in the annexes of this report.) He stressed very clearly that such equipment is never, under any circumstances, to be regarded as a substitute for traditional teaching, only as an aid to larger effectiveness on the part of the teacher whose use of the traditional 'blackboard' at present is nothing short of slovenly and quite without value. In some ways Mr. Knight's talk linked up with the attitude expressed on a much larger scale by Professor Cooley in his theme of the need for greater efficiency in setting in motion the learning process.



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Discussion Groups.

Although time was provided by/each speaker at the end of his talk for questions and discussion, and this was seized upon with much enthusiasm by participants, discussion groups also met at other times either to follow up the talks or to branch out on to new teaching interests. Among the most important of these discussion groups, at which the main speakers were nearly always present and which were reported and issued to all participants, were the following:

Social Anthropology
World Literature (especially in relation to the International Baccalaureate)
English as a Second Language
The Teaching of Mathematics
The Theory of Knowledge Course in the International Baccalaureate
Trends in Science Teaching
History (particularly in the IB)
Individualized Instruction
Psychotherapy
Objectivity and Subjectivity
Children's writing
The International Baccalaureate
The Teaching of Reading
Educational Philosophies

Annexes to Report.

Among the annexes are included: >

Working and other bibliographies by William Cooley, Jean Dean, David Holbrook and Peter Lomas

Audior Visual Methods of Teaching - Books and Sources

A Special Additional Report on the talks by Professor Cooley, and Commercially Available Curricula from the Learning Research and Development Center, University of Pittsburgh



A Report on the Workshop sent to the 'Times Educational Supplement's by Geneva correspondents, Lynne Armstrong and Russell Hay

Acknowledgements



ANNEXES

Publications by W. W. Cooley

Cooley, W. W. The application of a developmental rationale and methods of multivariate analysis to the study of potential scientists. Unpublished doctoral dissertation, Harvard University, 1958.

Cooley, W. W. Attributes of potential scientists. Harvard Educational Review, 1958, 28(1), 1-18.

Cooley, W. W. Identifying potential scientists: A multivariate approach. School Science and Mathematics, May 1959, 381-396.

Cooley, W. W. National welfare and scientific education. In J.S. Roucek (Ed.), The challenge of science education. New York: Philosophical Library, 1959. Pp. 41-53

Watson, F. G., & Cooley, W. W. Needed research in science education. In Rethinking science education, Fifty-ninth yearbook of the National Society for the Study of Education, Part I. Chicago: NSSE, 1960, Pp. 297-312.

Cooley, W. W. Challenges to the improvement of science education research. Science Education, 1961, 45(5), 383-387.

Cooley, W. W. Research methodology and modern data processing. Harvard Educational Review, 1961, 31(3), 257-263.

Cooley, W. W., & Bassett, R. D. Evaluating innovation. Harvard Graduate School of Education Alumni Bulletin, Summer 1961, 11-15.

Cooley, W. W., & Bassett, R. D. Evaluation and follow-up study of a summer science and mathematics program for talented secondary school students. Science Education, 1961, 45(3), 209-216.

Cooley, W. W., & Klopfer, L. E. <u>Test on Understanding Science.</u> Princeton: Educational Testing Service, 1961.

Cooley, W. W., & Reed, H. B., Jr. The measurement of science interests: An operational and multidimensional approach. Science Education, 1961, 45(4), 320-326.

Cooley, W. W., & Lohnes, P. R. Multivariate procedures for the behavioral sciences. New York: Wiley, 1962.

Cooley, W. W. Predicting choice of a career in scientific research. Personnel and Guidance Journal, 1963, 42(1), 21-28.



Cooley, W. W., & Klopfer, L. E. The evaluation of specific educational innovations.

Journal of Research in Science Teaching, 1963,

1, 73-80.

Klopfer, L. E., & Cooley, W. W. The history of science cases for high schools in the development of student understanding of science and scientists.

Journal of Research in Science Teaching, 1963, 1, 33-47.

Cooley, W. W. A computer-measurement system for guidance. Harvard Educational Review, 1964, 34(4), 559-572.

Cooley, W. W. The potential scientist pool. Journal of Research in Science Teaching, 1964, 2(1), 24-32.

Cooley, W. W. Research frontier--Current research on the career development of scientists. <u>Journal of Counseling Psychology</u>, 1964, 2(1), 88-93.

Cooley, W. W., & Jones, K. J. Computer systems for multivariate statistical analysis. Educational and Psychological Measurement, 1964, 24(3), 645-653.

Cooley, W. W. The classification of career plans. In Proceedings of the 73rd Annual Convention of the American Psychological Association. Washington, D. C.: APA, 1965. Pp. 361-362.

Cooley, W. W. Further relationships with the TALENT battery. Personnel and Guidance Journal, 1965, 44(3), 295-303.

Cooley, W. W. The Project TALENT data bank. <u>Journal of Educational Measurement</u>, 1965, 2(2), 134-138.

Cooley, W. W. Project TALENT implications for science education. Journal of Research in Science Teaching, 1965, 3(3), 211-215.

Cooley, W. W., & Miller, J. D. The Project TALENT tests as a national standard. Personnel and Guidance Journal, 1965, 43(10), 1038-1044.

Lee, E. C., & Cooley, W. W. Career development of science teachers: A cooperative study with Project TALENT. <u>Journal of Research in Science Teaching</u>, 1965, 3(4), 300-306.

Cooley, W. W., & Becker, S. J. The junior college student. Personnel and Guidance Journal, 1966, 44(5), 464-469.

Flanagan, J. C., & Cooley, W. W. Project TALENT one-year follow-up studies. Pittsburgh: Project TALENT Office, University of Pittsburgh, 1966.



Cooley, W. W. Interactions among interests, abilities, and career plans. Journal of Applied Psychology Monograph, 1967, 51(5, Whole No. 640), 1-16.

Combs, J., & Cooley, W. W. Dropouts: In high school and after high school. American Educational Research Journal, 1968, 5(3), 343-363.

Cooley, W. W., & Glaser, R. An information and management system for Individually Prescribed Instruction. Pittsburgh: Learning Research and Development Center, 1968. (Working Paper 44)

Cooley, W. W., & Lohnes, P. R. Predicting development of young adults. Palo Alto: American Institutes for Research, 1968.

Lohnes, P. R., & Cooley, W. W. Introduction to statistical procedures: with computer exercises. New York: Wiley, 1968.

Cooley, W. W. Computer-assisted instruction in statistics. In R.C. Milton and J. A. Nelder (Eds.), Statistical computation. New York: Academic Press, 1969. Pp. 337-347.

Cooley, W. W. 'Computer systems for guidance. In Computer-based vocational guidance systems. Washington, D. C.: United States Government Printing Office, 1969. Pp. 61-71. (Paper presented at the Fourth Symposium for Systems Under Development for Vocational Guidance)

Cooley, W. W. Data processing and computing. In R. L. Ebel (Ed.), Encyclopedia of educational research. (4th ed.) Toronto Macmillan, 1969. Pp. 283-291.

Cooley, W. W., & Glaser, R. The computer and individualized instruction. Science, 1969, 166, 574-582. (Also, LRDC Reprint 53)

Cooley, W. W., & Hummel, R. C. Systems approaches in guidance, Review of Educational Research, 1969, 39(2), 251-262. (Also, LRDC Reprint 47)

Cooley, W. W. Computer assistance for individualized education. Journal of Educational Data Processing. 1970, 7, 18-28. (Also, LRDC Reprint 57)

Cooley, W. W. Computer-managed instruction. In L. C. Deighton (Ed.), The encyclopedia of education. New York: Macmillan, 1971. Pp. 400-404.

Cooley, W. W. Methods of evaluating school innovations. Pittsburgh: Learning Research and Development Center, 1971. (Publication 1971/26)



Cooley, W. W. Techniques for considering multiple measurements. In R. L. Thorndike (ed.), Educational measurement. (2nd ed.) Washington, D. C.: American Council on Education, 1971. Pp. 601-622. (Also, LRDC Publication 1971/15)

Cooley, W. W., & Lohnes, P. R. Multivariate data analysis. New York: Wiley, 1971.

Cooley, W. W. Evaluation in a research and development context. Pittsburgh: Learning Research and Development Center, 1973. (Publication 1973/17)

Glaser, R., & Cooley, W. W. Instrumentation for teaching and instructional management. In R. M. W. Travers (Ed.), Second handbook of research on teaching. Chicago: Rand McNally, 1973. Pp. 832-857.

Cooley, W. W. Assessment of educational effects. Educational Psychologist, 1974, 11(1), 29-35.

Cooley, W. W. Methods of evaluating school innovations. In H. Poynor (Ed.), Problems & potentials of educational r&d evaluation. Austin, Texas: Educational Systems Associates, 1974. Pp. 37-61.

Cooley, W. W., & Leinhardt, G. Evaluating individualized education in elementary school. In P. O. Davidson, F. W. Clark, and L. A. Hamerlynck (Eds.), Evaluation of behavioral programs in community, residential and school settings. Champaign, Illinois: Research Press, 1974. (Also, LRDC Publication 1974/14)

Cooley, W. W., & Lohnes, P. R. Evaluative inquiry in education, in preparation.

Books by Joan Dean

1. Room to Learn Series
Four books at present published:
Working Space
Language Areas
A place to paint
Display

One further book is in the press: Room Outside

pub. by: Evans (Books) Ltd., Montague House, Russell Square, London, WC1B 5BX



One more is in preparation:
Storage

and

Citation Press, New York.

2. Framework for Reading - Evans

L 2.80

Joan Dean and Ruth Nichols

3. British Primary Schools Today Series

This series is the outcome of a joint project between the British Schools Council and the Ford Foundation and is published by Macmillan, Basingstoke, England., and Citation Press, New York.

The whole series covers many aspects of primary education. My own book in this series is called "Recording Children's Progress".

4. Exploring your World

This is a series on environmental studies which is conceptually based. It is published by Holmes, McDougall Ltd., Allander House, Leith Walk, Edinburgh, Scotland.

There are 66 books in the series, which is planned in 13 units, each of which contains books to cater for children with a reading ability from about 8-12 years. 20 books in the series are now published.

5. Reading, Writing and Talking

Published by A and C Black Ltd., 4 - 6 Soho Square,

J. Londoń.

This book was not on show at the Conference, but gives a general account of one teaching language skills.

6. Art and Craft in the Primary School

A and C Black.

7. Religious Education for children

Ward Lock,

Baker Street,

London

Changing Attitudes to the Nature of Man - A working bibliography by David Holbrook, with addenda by Masud Khan, Andrew Brink and David Boadella.

This is a working bibliography for students and others interested in developments in subjective disciplines: psychoanalysis, existentialism, philosophical biology, philosophical anthropology and other spheres in which thinkers are radically challenging predominant attitudes to human nature, culture and society.

The compiler is grateful to Masud Khan, David Boadella, Roger Poole and others for help.

This booklist is intended to help the reader find his way into the revolution of thought discussed by Marjorie Grene in her book The Knower and the Known. Professor Grene herself owes a debt to Michael Polanyi, the chemist turned philosopher. And his work in turn lies behind that of several writers who have sought to emphasise the need to pay attention to man's inward life and being, against the impress of 'objectivity' and reductionism F.R. Leavis, Roger Poole, Theodore Roszak, and E.K. Ledermann. All these writers are seeking to restore vision and creativity to man. But there are no short cuts to this restoration; as Marjorie Grene says, the escape from established ways of thinking about man and nature will be 'slow and difficult': it requires a radical re-examination of the Newtonian-Gallilean and Cartesian traditions, and involves us in 'conceptual reform'.

It thus requires no dropping-out, or taking of trips no mere lapse into 'dissolutions', subversiveness, or 'self-expression' but rather application to a daunting amount of relevant and exacting thought which we must try to grasp, urgently. The urgency is enhanced by the fact that the new views of man which are emerging from philosophical anthropology contrast strikingly with the views of man at present manifest in popular thought, and in our literary culture, film, 'pop' conditioning, avant-garde theory, and the areas of political protest and 'underground' culture. There, the 'naked ape' model is rampant, while man's make-up is still conceived in mechanistic terms, as if he were determined by 'real' primary impulses (of sex and aggression) and only unwillingly civilised. This model omits 'intentionality' creative choice, and visión and the urgency arises because of a deepening crisis, in which without vision the people perish!.



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There are various possible starting points:

HODGKIN, R. A. Reconnaissance on an Educational Frontier, OUP

Mr. Hodgkin's Bibliography is especially useful.

POOLE, Roger. Towards Deep Subjectivity, Allen Lane, 1972

Chapter 4 is an attempt to spell out the immediate urgency of 'Husserl's philosophy; see below. Another attempt from the area of those seeking an 'alternative' culture is:

ROSZAK, Theodore. Where the Wasteland Ends, Faber, 1973

Perhaps the best start is to shake up one's ideas of what science is, about how one knows, and what knowing is, in a systematic study of the 'objective' tradition:

GRENE, Marjorie. The Knower and the Known, Faber, 1966

This book takes one naturally into the discussions by Michael Polanyi of the "tacit" elements in knowing - which are those too often left out of account (as, for instance, by behaviorists).

POLANYI, Michael. . The Tacit Dimension, Routledge, 1967

POLANYI, Michael. Personal Knowledge, Routledge, 1958

By now a number of further questions offer themselves for pursuit. First there is the question of the nature of science. Once one accepts the argument that science can be nothing other than "persons knowing", after science is a great act of faith. This is discussed in

POLANYI, Michael. Science, Faith and Society, University of Chicago Press, 1969

Related problems are also discussed in these distinguished books, too long neglected:

MACMURRAY, John. The Self as Agent, Faber, 1957.

MACMURRAY, John. Reason and Emotion, Faber 1935

Having explored the problems of how knowledge is only established by persons experiencing their world, considerable problems are raised



of how we know. Of course, this has been the preoccupation of philosophers since philosophy began; but as Marjorie Grene indicates, significant questions asked in Plato's Meno have never been answered: "How can we ask for something if we do not so much as know what that something is? How can knowledge come of ignorance? How can we know the unknown, describe as our goal what is, as yet, undescribable?"

The investigations of "whole persons" knowing a "life world" takes us in a number of directions. First, there is an especial development in thought about the observation of living things - in the philosophy of biology. Secondly, there are developments inthought about looking at man. And thirdly, since it is impossible to look at man without taking the problems of consciousness and meaning into account, there are developments in thinking about sign, meaning and symbolism. In these spheres of thought, we encounter the phenomenologists, the existentialist philosophers, and psycho-analysis.

First, then the philosophy of biology. A key work in the new thinkings here is

GRENE, Marjorie. Approaches to a Philosophical Biology, Basic Books U.S.A., 1965

This book discusses the work of a number of philosophers of biology in Europe: Adolf Portman, Helmuth Plessner, F.J.J. Buytendijk, Erwin W. Strauss, and Kurt Goldstein. Themes discussed are the ways in which we observe animal behavior and make deductions from it; the special nature of living things; levels of being; the limitations of the Galilean approach to reality; the inward, self-directedness of living creatures and the "something like consciousness" in them; the special nature of consciousness in man and the existential problems that arise from this; the inherent cultural nature of man and the responsibilities and potentialities this involves; the nature of play; the origins of perception, and the sense of identity in the infant; the ethical nature of man, and many other themes closely related to problems of culture and education. Perhaps the two most relevant themes are the exposure of the fallacies of "conditioned reflex". (Pavlovian) thinking and the approaches of the Behaviourists (though this is extremely difficult to follow): and the discussion of the differences beween the two main streams of existentialism. That is, the Heidegger-Sartre stream on the one hand which is a philosophy concerned with the "lonely individual, thrown into a threatening world, free to make the world his own, yet never succeeding, falling forever



tragically short of the world creation and self-creation at which he aims a philosophy of isolation, alienation and despair". And there is the stream on the other which finds capacities in man to overcome his "nothingness" by love and creativity. Marjorie Grene traces this from the influence of Binswanger, who, she says "simply takes Heideggerian being-in-the-world, the very essence of which demands arrogance and hatred as the road from me to thee, and injects into it, with sublime incompatibility, a generous dose of love". The latter stream of existentialism is developed in Europe by Buytendijk and Erwin W. Straus; in America by Rollo May; in England by Roger Poole, E.K. Ledermann, and Peter Lomas, in their various ways. Important here are

STRAUS, W. W. Phenomenological Psychology, Basic Books, 1966

O'CONNOR, D. & LAWRENCE, N. eds. Readings in Existential Phenomenology, Prentice Hall, 1967

"Husserl's Phenomenology and its significance for Contemporary Psychology" on Buytendijk.

The existentialist stream which can find love and "meeting" (or creative reflection between persons) also runs from Husserl in Europe and Martin Buber in U.S.A. A significant figure in European thought is the late opponent to Sartre, Maurice Merleau-Ponty.

MERLEAU-PONTY. The Phenomenology of Perception, Routledge, 1966

Merleau-Ponty is a much more serious philosopher than Sartre, and may well prove more important in the end, despite Sartre's literary influence and his present predominance. But he is extremely difficult to read, and is perhaps best understood through Marjorie Grene's use of him, and the convergence between his thought and Polanyi's.

Before we leave the philosophy of biology behind, however, we need to not that some serious observation of animal behavior goes on in a very different spirit from either the popular misinterpretations made by writers like Robert Ardrey or the absurdities of the "skinner cage" behaviourists. This is not only to point to the genuine work of K. LORENZ, and even the work of Desmond Morris on animals (what is false is his extrapolation of findings there to philosophical anthropology which are a kind of poor poetry or facile speculation); but to other observers who approach animal behavior in a quite different spirit:



TAYLOR, C. The Exploration of Behaviour; Kegan Paul, 1969

*THORPE, W. H., Learning and Instinct in Animals, Methuen, 1956

THORPE, W. H. "Ethology and Consciousness", chapter 19 of Brain and Conscious Experience, ed. J.C. ECCLES, Springer Verlag, U.S.A., 1966

THORPE, W. H. The Uniqueness of Man, ed. Roslansky, North Holland, Amsterdam, 1969

PORTMANN, Adolf. Animals as Social Beings, Untilunson, 1961

PORTMANN, Adolf. Animal Camouflage, Ann Arbor, 1959

LORENZ, K. King Solomon's Ring, Methuen, 1964

LORENZ, K. On Aggression, Methuen, 1966

See also:

PORTMANN, Adolf. New Paths in Biology, Harper and Row, 1961

DOBZHANSKY, T. The Biological Basis of Human Freedom,
Columbia, 1956
The Biology of Ultimate Concern, Rapp, 1971

PANTIN, C.F.A. Science and Education, Cardiff, 1963

TOWERS, Bernard, and LEWIS, John. <u>Naked Ape - or Homo</u> Sapiens? Garnstone 1969

It seems a great shame that Buytendijk is largely untranslated, as he makes devastating demolition of analytical methods in the approach to the exploration of behaviour. The same is true of Von Weizsäcker's Gestaltkreis. We should perhaps reflect on the predominance in English thought in this area of behaviourist theories and theories derived from experimental psychology (as in Penguin paper backs) when a whole range of works offering devastating criticism of these approaches remain untranslated and unavailable. Marjorie Grene gives an excellent account in her Approaches however, and this is at least a start.



Philosophical biology impinges of course on philosophy proper - not least in the rejection of Cartesian dualism. We should perhaps study

RYLE, G. The Concept of Mind, (Hutchinson, 1949)

This contains the famous "ghost' in the machine" discussion, a contemporary philosopher's case against dualism. See also chapter VI on "self-knowledge".

Marjorie Grene, however, suggests that it is possible to get yet deeper into such problems. She refuses, as Austin, Ryle and others habitually do, 'laboriously to approach a philosophical problem, only to turn one's back on it when it comes plainly into view'
Approaches, p. 186.

So, we need to explore the problem of the rejection of dualism more deeply.

POLANYI, Michael. Knowing and Being, Routledge, 1969

SPICKER, Stuart, F. The Philosophy of the Body, Chicago, 1970

BUYTENDIJK, F.J.J. Pain: Its Modes and Functions, Chicago, 1943

BUYTENDIJK, F.J.J. "The Body in Existential Psychology", Review of Existential Psychology and Psychiatry, Vol. 1, No. 2 (1961)

JONAS, Hans. The Phenomenon of Life: Toward a Philosophical Biology, Harper and Row, 1966

BINSWANGER, Ludwig. Being-in-the-world: selected papers, ed. Jacob Needleman. Basic Books, 1963

PLESSNER, Helmuth. Laughing and crying, Northwestern, 1970

That man exists, thinks, feels and seeks meaning in a body that has

That man exists, thinks, feels and seeks meaning in a body that has a history, and is indivisible from a "psychic tissue" and a "formative principle" in his creative existence is a theme of recent psychoanalytical thought. Here we may distinguish between "object-relations" schools, which explore the origins of identity in being "creatively reflected" by the mother, and see the "ultimate goal of the libido" not as pleasure, but as "the object" - the "significant other" (to use a term from Buber) in love; and the existentialist schools, which find the primary need in man not to be the will-to-power, but the will-to-



making. These are not conflicting schools, but complementary - though they do imply a rejection of much in Freud (his metapsychology, his psychic determinism, his social pessimism, his insistence on sexuality, and his death instinct dogma).

FREUD, S. The Future of an Illusion, Hogarth, 1928 A fundamental criticism of Freud was made by

SUTTIE, Ian D. The origins of love and hate, Penguin, 1935

See also:

RIEFF, P. Freud - The Mind of the Moralist, Gollancz, 1960 The most valuable findings of Freudian psychoanalysis, as they have influenced thought about child care, are found in such books as

BOWLBY, John. · Child care and the growth of love, Penguin, 1953

CHALONER, Len. Feeling and Perception in Young Children, Tavistock, 1963.

ERIKSON, Erik. Childhood and Society, Penguin, 1965

It is important to try to group some of the significant revisions made by later thinkers, notably by Melanie Klein:

KLEIN, Melanie. The Psychoanalysis of Childhood, flogarth, 1932

Contributions to Psychoanalysis, Hogarth, 1948

Developments in Psychoanalysis, Hogarth, 1952

New Directions in Psychoanalysis, Tavistock, 1955

Envy and Gratitude, Tavistock, 1957

Our Adult Society and its Roots in Childhood, 1963

A useful exploration of the relevance of psychoanalysis to thinking about man in society was the early work by

KLEIN, Melanie and RIVIERE, Joan. Love, Hate, and Reparation, Hogarth, 1938



For an account of Melanie Klein's contribution see

SEGAL, Hannah. <u>Introduction to the work of Melanie Klein</u>, Tavistock, 1964

The Kleinians tend to be somewhat orthodox, and inflexible; one of their fundamental principles is a belief in the death instinct and a kind of psychic entropy. For a detailed critique of this legacy from Freud see GUNTRIP'S Personality Structure mentioned above and my own attempt to summarise these theories:

HOLBROOK, David. . Human, Hope and the Death Instinct, Pergamon, 1971

Other writers on psychoanalysis belonging to the English schools are:

BALINT, Michael. Primary Love and Psychoanalytical Technique, Hogarth, 1952

The account of the nature of love and hate in this study is most valuable.

FAIRBAIRN, W.R.D. <u>Psychoanalytical Studies of the Personality</u>.

Tavistock, 1952

This contains a classical account of the nature and origins of schizoid states, and the moral inversions that arises from these —an analysis of great importance for culture and philosophy.

GUNTRIP, Harry. Schizoid Phenomena, Object, Relations and the Self, Hogarth, 1968

This employs Fairbairn's approach and model of human nature to draw attention to the schizoid problem of identity that underlies all other problems. The book gives an excellent account of some important recent work by Winnicott, and a most useful historical summary of the development of psychoanalytical thought.

One of the most significant figures in British Psychoanalysis was the late D.W. Winnicott, whose books take the problem into the heart of the earliest infant-mother relationship, and the origins there of identity, the capacity to perceive, and of culture which, in his theory, now becomes primary.



WINNICOTT, D.W. Collected Papers through Paediatrics to Psychoanalysis, Tavistock, 1958

The Child and the Outside World, Tavistock, 1957

The Child and the Family, Tavistock, 1957

The Family and Individual Development,

Tavistock, 1965

The Maturational Processes and the Facilitating

Environment, Hogarth, 1966

The Child, The Family and the Outside World,

Penguin, 1964

"Mirror-role of Mother and Family" in The

Predicament of the Family, ed. Lomas P., Hogarth, 1967

"Male and Female Elements to be found Clinically in Men and Women", discussed thoroughly in Guntrip, H. Schizoid Phenomena. q.v. Published as 'Creativity and its origins' in Playing and Reality, Tavistock, 1971.

Here I believe it would be useful to refer to the films produced by James Robertson and his wife on Young Children in Brief Separation (Tayistock Child Development Research Unit).

Other British (and some other) Psychoanalytical writings worth studyin are:

HOME, H. J. The Concept of Mind, in Rycroft, C. (op. cit.)

BOADELLA, David. Wilhelm Reich, the Evolution of his Work. Vision Press, 1973

DN, W.R. Learning from Experiences. Hogarth, 1962

LOMAS, Peter. The Predicament of the Family, Hogarth, 1967

True and False Experience, Allen Lane, 1973

MILNER, Marion. On Not Being Able to Paint, Heineman, 1950

In the Hands of the Living God, Hogarth, 1969



MASLOW, Abraham. Towards a Psychology of Being, Van Nostrand Reinhold, 1968

MENNINGER, Karl. Man Against Himself, Harvest, 1938

JUNG, C.G. Contributions to an Analytical Psychology, Kegan Paul, 1928 ...

Modern' Man in Search of a Soul, Kegan Paul, 1933

WILHELM, R. The Secret of the Golden Flower, Routledge, 1931

WESTMAN, H. The Springs of Creativity, Kegan Paul, 1961

SUTHERLAND, J.D. Psychoanalysis and Contemporary Thought, 1958

KHAN, Masud, R., The Function of Intimacy and Acting Out in Perversions, in Sexual Behaviour and the Law, ed. Slovenko, Thomas, Illinois, U.S.A., 1968

Perversion and Alienation, 1973

Existentialist Psychoanalysis, in its links with phenomenology, is known in Britain through the work of R.D. Laing.

LAING, R.D. The Divided Self, Tavistock, 1961

The Self and Others, Tavistock, 1961

LAING, R.D. and ESTERSON, Aaron. Families of Schizophrenics, Vol. 1 of Sanity, Madness and the Family. Tavistock Press, 1964

This book is a piece of achieved praxis in the field of subjective method, and represents the best that Laing's approach, when applied, can produce. (This is quite independent of his cultural-theoretical position, which has yet to become clear). Lacking, however, are insights into the intrapsychic vulnernabilities which make some people foci of such confusion: see LOMAS, Peter, on Laing and Estherson in True and False Experience, Allen Lane, 1973.

Unfortunately, Laing has tied his own brand of existentialist thought to the tail end of French nihilism, and to Sartre's immoralism. In The Politics of Experience he urged an insurrectionary attitude to culture and society together with the desire to drive people "out of



their wretched minds", as if intelligence and civilised values were inimical to spiritual "release". Lurking beneath this approach, it would seem, is Freud's instinct theory, and the denial of two thousand years of created civilized values. The influence of David Cooper on Laing seems to have been disastrous. With Esterson Laing offered valuable insights into the families of schizophrenics. But although Laing had edited some valuable work by existentialists and phenomenological writers, he has not advanced the new subjective disciplines advantageously by his influence, as Rollo May has in America.

A more adequate form of existentialist psychoanalysis seems to be developing in America:

FARBER, Leslie H. The Ways of the Will, Constable, 1966

MAY, Rollo. Existence - A new Dimension in Psychiatry. New York, 1960

Love and Will. Souvenir Press, 1970

Another important writer on existentialist psychotherapy is the Professor of Psychiatry at the University of Vienna

FRANKL, Viktor. From Death camp to Existentialism, Beacon Press. Boston

Psychotherapy and Existentialism, Souvenir Press,

1970

The Doctor and the Soul, Souvemr Press, 1970

The latter contains some valuable essays on The Meaning of Life, the Meaning of Death, the Meaning of Work and the Meaning of Love. Frankl insists on the "spiritual" dimension of man (but points out that he uses his word only in its specifically human dimension). Valuable criticisms of Frankl's approaches, and of many others including Laing are made in

LEDERMANN, E.K. <u>Existential neurosis</u>, Butterworth, 1972

The following will be useful in understanding existentialism itself:

KOHL, Herbert. The Age of Complexity, Merton Books, U.S.A, 1965

Useful on Husserl, Biswanger, and Wittgenstein.



KAUFMANN; Walter ed. Existentialism from Dostoevsky to Sartre (Basic writings). Meridian Books, 1956

GRENE, Marjorie. <u>Introduction to Existentialism</u>, foriginally published as <u>Dreadful Freedom</u>) Chicago, 1959

Valuable on some of the absurdities of Sartre: "Sartre's philosophy seems to feed on perverseness", she says.

A useful book on existentialism and its implications for education is:

KNELLER, George F. Existentialism and Education, John Wiley & Sons U.S.A., 1958

In his "critique" at the end Kneller points towards the need for something more positive, and less hopeless - as is perhaps suggested by Rollo May's work and that of Marjorie Grene since.

MURDOCH, Iris. 'Sartre, Bowes and Bowes, 1958,

WARNOCK, Mary. Existentialist Ethics, MacMillan, 1967

BUBER, Martin. I and Thou, Edinburgh 1937

Between Man and Man, London 1947

SCHLIPP and FRIEDMAN. The Philosophy of Martin Buber, Cambridge, 1962,

For a wider study the following are relevant:

HEIDEGGER, Martin. Existence and Being, London, 1949

Being and Time, London, 1962

KIERKEGAARD, Soren. Concluding Unscientific Postscript,
O.U.P., 1941
Philosophical Fragments, O.U.P., 1941

SARTRE, Jean-Paul. Existentialism and Humanism, London, 1948

Being and Nothingness, London, 1957

Nausea, London, 1962





Sketch for a Theory of the Emotions, London 1962

ROUBICZEK, Paul. Existentialism, For and Against, Cambridge, 1964

WARNOCK, M. The Philosophy of Sartre, London, 1965

RUGGIERO, Guido de. Existentialism, Seole, 1946

HUSSERL, Edmund. Works published in English are: Ideas, Allen and Unwin, 1931

Cartesian Meditations, The Hague, 1960

But to approach Husserl by these works is heavy and difficult. (The translation, 1931, of <u>Ideas</u> etc., doesn't help matters, as it was undertaken before his main ideas had been grasped in England: a better translation is Ricoeur's in French). <u>Ideas</u> (1931) and <u>Cartesian Meditations</u> (1929-31) are works standing at the two opposed ends of Husserl's career, and Roger Poole believes that much of what he advances in the latter is opposed, at least implicity, to what he was advancing in Ideas.

The best book, the most easily comprehensible, the most relevant, the most absorbing, the least abstract, and the most culturally perceptive work of this philosopher is The Crisis of European Sciences and Transcendental Phenomenology, translated by David Carr, Northwestern University Press, 1970. In this, Husserl advances his view of the endemic sickness in our cultural-scientific-objective attitudes, traces them back to Galileo and Descartes, and sets out the philosophical task for today with brilliant elan and conviction.

There are one or two useful works on Husserl:

RICOEUR, Paul. Husserl, an Analysis of his Phenomenology, Northwestern University Press, 1967

Roger Poole has tried to spell out the immediate urgency of Husserl's case in Crisis in

POOLE, Roger. Towards deep subjectivity, (op. cit.), Chapter 4, Subjective objections to "objectivity", passim.



PIVCEVIC, Edo. Husserl and Phenomenology, Hutchinson, 1970

Is technically helpful. The main article in Sartre's phenomenological prise de position is his 1936 essay, available in paperback as

SARTRE, J.P. The transcendence of the Ego, Farrar, Straus and Giroux, 1957

In which he departs radically from Husserl and sets French phenomenology on its own independent path. The introduction of Merleau-Ponty's Phenomenology of Perception (op. cit.) is the follow-up to this (1945): what is phenomenology today? i.e. the question of what phenomenology was becoming, was still capable of, was still wide open to question in 1945.

GRENE, Marjorie. Martin Heidegger, Bowes and Bowes, 1957

VAN, DEN BERG, Jan H. The Phenomenological Approach to Psychiatry, Oxford, 1955

From existentialism and phenomenology we may turn to philosophers who have concerned themselves with problems of symbolism and meaning.

First there is Wittgenstein who said "meaning is use". Anyone with a tough enough appetite could tackle

WITTGENSTEIN, Ludwig. The Blue and Brown Books, Oxford, 1958

Philosophical Investigations, Oxford, 1958

MALCOLM, Norman. Ludwig Wittgenstein. A Memoir, O.U.P., 1958

WINCH, Peter, Ed. Studies in the Philosophy of Wittgenstein, Routledge, 1969

The link between the Wittgensteinian manner and psychoanalysis is perhaps made by:

WISDOM, John. Philosophy and Psychoanalysis, Oxford, 1952

The essay that most interests me in this book is the Review of C.H. Waddington's Ethics, on the location and existence of ethical values.



Since psychoanalysis has re-established culture and the problem of meaning as primary needs of man, one can see a link between object-relations and existentialist psychotherapy, and the post-Kantian philosophers who pursue the question, "what is man?".

CASSIRER, Ernst. Language and Myth, Dover Books, 1953

An Essay on Man, Yale, 1944

LANGER, Suzanne K. Philosophy in a New Key, a study in the symbolism of reason, rite and art, Harrad, 1957

Philosophical Sketches, O. U.P., 1962

Mind, an Essay on Human Feeling, Johns

Hopkins, Baltimore, 1967

KUHN, T.S. The Structure of Scientific Revolution, University of Chicago Press, 1962

Other related books in various spheres are:

BURTT, Edwin A. The Search of Philosophical Understanding, Allen and Unwin, 1967

The Metaphysical Foundations of Modern Physical Science, Routledge, 1932

DE CHARDIN, Teilhard. The Phenomenon of Man, Harper, 1959

BROWN, Norman. Life against Death, Sphere Books, 1959

WILD, John. Existence and the world of Freedom, Prentice-Hall, 1963

PHILOSOPHICAL ANTHROPOLOGY - A Booklist by David Holbrook.

Books mentioned in my lectures

CASSIRER, Ernst An Essay on Man, Yale 1944.



This is the book in which Cassier says natural science cannot give an adequate account of man and that he can be defined as the animal symbolicum.

MASLOW, Abraham. Towards a Psychology of Being, Van Nostrard Reinhold, 1968

Defines the new kind of psychology based on a recognition of man's mormal creativity and his higher strivings - and the moral implications.

MILNER, Marion. On not being able to Paint, Keinemann, 1950

Marion Milner was a scientist, sister of Lord Blackett, and this book records her discovery of the subjective realm. See also her remarks on the "formative principle" in: In the Hands of the Living God, Hogarth, 1969

POLANYI, Michael. The Tacit Dimension, Routledge, 1967 and Personal Knowledge, Routledge, 1958

Attempts ty a scientist to investigate the subjective basis of all knowing, and how we "dwell in," the objects of our investigation and "subception" as the basis of knowledge.

See also:

GRENE, Marjorie. The Knower and the Known, Faber, 1966

Marjorie Grene has also investigated and presented the work of the newer kind of philosophical biologists in: Approaches to a Philosophical Biology, Basic Books, U.S.A., 1965 (on Adolf Portman, Helmuth Plessner, F.J.J. Buydendijk, Irwin W. Straus and Kurt Goldstein. Marjorie Grene also invokes the work of Merleau-Ponty and Ludwig Binswanger).

BINSWANGER, Ludwig. Being-in-the-World, Selected Papers, ed. Jacob Needleman, Basic Books, 1963

A good account of the historical background to Existentialist Psychotherapy, and of "Dasein" analysis is given in:

Rollo May and others, Basic Books, New York, 1960



A very readable existentialist psychotherapist is:

FRANKL, Victor, Professor of Psychiatry at Vienna,

From Death Camp to Existentialism,

Beacon Press, Boston

and Penguin Books The Doctor and the Soul, Souvenir Press, 1970

See also:

MAY, Rollo. Love and Will, Souvenir, 1970

LEDERMANN, E.K. Existential Neurosis, Butterworth, 1972

GRENE, Marjorie. Introduction to Existentialism, Chicago, 1959

On values and "ethical living" see the review article on Waddington by:

WISDOM, John. Philosophy and Psychoanalysis, Oxford, 1952

See also:

LANGER, Susanne. Philosophy in a New Key, Harvard, 1957 Other Books and Papers

ROSZAK, Theodore. Where the Wasteland Ends, Faber, 1973

POOLE, Roger. Towards Deep Subjectivity, Allen Lane, 1972

THORPE, W.H. Coming Soon, Nature and Human Nature

TOWERS, Bernard, and LEWIS, John. Naked Ape or Homo Sapiens? Garnstone, 1969

MUMFORD, Lewis. The Myth of the Machine

WINNICOTT, D.W. Playing and Reality, Tavistock, 1972

LOMAS, Peter. True and False Experience, Alan Lane, 1973



ABBS, Peter (ed.) The Black Rainbow, Heinmann, 1970

Papers

ALLCHIN, W.H. Young People: Problems of adaptation to a fragmented Society

The Guild of Pastoral Psychology, Guild lecture no 157, Oct. 1970, 15p and 41/2p postage from 41 Redcliffe Gardens, London, S.W. 10

Life Transcending Physics and Chemistry.

POLANYI, Michael. Chemical and Engineering News, August 21,

from Gryphon Press, Brechfa Llanon, Aberystwyth, Wales

Nuffield Lecture: Science and Man by Michael

Polanyi

Proceedings of the Royal Society of Medicine. Vol 63 September 1970, page 969

For a characteristic phenomenological essay, see:

STRAUS, Erwin. A Historiological View of Shame in The Case against Pornography, ed. David Holbrook, Tom Stacey, 1973

See also:

DRURY, M. O'C. The Danger of Words, Routledge, 1973

HOLBROOK, David. The Masks of Hate, Pergamon, 1971

English in Australia Now, CUP 1972

GUILD OF PSYCHOTHERAPISTS - A List of Books

We do not intend to provide a list of books which are required reading. The following constitutes a list of those books which some of us have found useful either because they are classical texts (as, for

instance, Freud's "The Interpretation of Dreams") or they expound ideas which in general, reflect those of the Guild, or they are readable and/or authoritative accounts of impostant viewpoints. They are books which, if and when we have a library of our own, we should like to see included. Some of the works on phenomenology make difficult reading and students may find them more useful if read in conjunction with Dr. John Heaton's seminars. Books which may be useful as introduction to various aspects of psychotherapy are marked by an asterisk. On the whole we have not included works of literature or poetry on the one hand or psychiatric books on the other, although we believe that these two areas (in their entirely different ways) are relevant to the practice of psychotherapy.

ARENDT, H. The Human Condition. Doubleday Anchor

BALINT, M., ORNSTEIN, P., BALINT, E. Focal Psychotherapy. Tavistock 1973

BALINT, M. The Basic Fault. Tavistock

BATESON, G. Steps to an Ecology of Mind. Paladin 1973.

(A collection of essays, including the "Double Bind" theory)

BOSS, M. The Analysis of Dreams. (1956) Rider

BOSS, M. Psychoanalysis and Daseinanalysis (1963)

Basic Books

*BOWLBY, J. Attachment and Loss, Vol. II (1973) Hogarth

BRIERLEY, M. Trends in Psychoanalysis. (1951). Hogarth (An acute appraisal of theory by a Freudian)

BUBER, M. I and Thou. T & T Clark

BUBER, M. The Knowledge of Man. Allen and Unwin (includes a discussion with Carl Rogers)

BASTENEDA, C. The Teachings of Don Juan. Penguin

Journey to Ixtlan. Bedley Head. These books constitute a very readable account of a Mexican Indian's initiation into "phenomenology".

ONLINE Penguin Press

ERIKSON, E. Identity, Youth and Cricic., 1966. Faber

Childhood and Society. Pelican

FAIRBAIRN, W.R.D. Psychoanalytical Studies of the Personality.

1952 Tayiotek

*FARBER, L. The Ways of the Will. Constable 1966

Freud Freud

FORDHAM, Frieda. An Introduction to Jung's Psychology. Penguin

FOUGAULT, M. Madness and Civilisation. 1967 Tavistock

FREUD, S. Much, if not most, of Freud's writings are still relevant. We would recommend especially the Introductory Lectures, Papers on Technique, Case Histories and "The Interpretation of Dreams" and New Introductory Lectures.

FROMM-REICHMANN, F. Principles of Intensive Psychotherapy.

Phoenix Books

*FROMM, E. The Forgotten Language. 1951. Holt Rinehart and Winston. (A very readable and thoughtful study of dreams)

GREENSON, R. The Technique and Practice of Psychoanalysis.
Int. Univ. Press. 1968 (Probably the best account of psychoanalytic technique available)

GOFFMAN, E. Asylums. 1961. Anchor Books

GUNTRIP, H. Schizoid phenomena, object-relations and the self. 1963. Hogarth. (A Freudian's attempt to loosen himself from mechanistic thinking.)

*HALMOS, P. The Faith of the Counsellors. 1965. Constable.

HEGAL, G. The Phenomenology of Mind. Allen and Unwin. (Difficult reading)

HEIDEGGER, M. Being and Time. S.C.M. Press. (Difficult, but the most basic and influential in this field in psychotherapy)

HUSSERL, E. Ideas. Allen and Unwin. (Difficult to read without help)

JUNG, C.G.

Analytical Psychology, its theory and practice.
RKP. 1968
The Practice Of Psychotherapy. Coll. Wks.
Vol. 16, pp. 1-161
Two Essays in Analytical Psychology. Coll. Wks.
Vol. 7
Memories, Dreams, Reflections. The Fontana
Library 1973

KIERKEGAARD, S. Purity of Heart. Fontana

The Sickness Unto Death. Doubleday Anchor

The Concept of Mind. Doubleday Anchor

*LAING, R.D. The Divided Self. 1960. Penguin The Self and Others. Penguin

LAPLANCHE, J. and PONTALIS, J-B. The Language of Psychoanalysis. 1973. Hogarth (an authoritative and comprehensive dictionary of psychoanalysis)

*LIDZ, T. The Family and Human Adaptation. 1964 Hogarth

LIDZ, T. The Person. Basic Books 1968 (A readable account of human development)

*LOMAS, P. True and False Experience. 1973. Allen Lane

MERLEAU-PONTY, M. Phenomenology of Perception. Routledge.
(Preface contains best short account of phenomenology and book is on much more than perception - sections on body, sexuality and language)

MEGLEAU-PONTY, M. The Primacy of Perception. N.W. Univ.

Press. (The essay, "The Child's Relationship
with Others" is very important)

MAY, R. Psychology and the Human Dilemma. 1967. Van Nostrand

NIETZSCHE, F. Thus spoke Zarathustra. Penguin Beyond Good and Evil. Vintage

POOLE, R. Towards Deep Subjectivity. Allen Lane 1972. (Can be used as an introduction to phenomenology)

PASCAL. Pensees. Penguin

*RAYNER, E. Human Development. Allen and Unwin. (An account by a psychoanalyst)

RECOEUR, R. Freud and Philosophy. 1970. Yale University Press

RIEFF, P. Freud: The Mind of the Moralist. 1965. Univ. Paperback

*ROGERS, C. Fr On Being a Person

*RYCROFT, C. Anxiety and Neurosis. 1968. Penguin
A Critical Dictionary of Psychoanalysis.
1968. Penguin
Imagination and Reality. Hogarth

SANDLER, J., DARE, C. and HOLDEN, A. The Patient and the Analyst. 1973. Allen and Unwin (A concise definition of the theory of psychoanalytical practice)

SARTRE, J-P. Being & Nothingness. (Difficult, but Part, IH and IV on the body and sexuality are worth reading)

SEARMES, H. Collected Papers on Schizophrenia and Related Subjects. 1965. Mogarth (a detailed account of

work with schizophrenic people by an original thinker)

*SEGAL, H. Introduction to the work of Melanie Klein.

Hogarth

*SHARPE, E. Dream Analysis. Hogarth

ST. AUGUSTINE. Confessions. Penguin

*STEINZOR, E. The Healing Partnership. 1968. Secker &

Warburg

STORR, A. The Integration of the Personality. Penguin

SUTTIE, I. The Origin of Love and Hate. Penguin

SZASZ, T. The Myth of Mental Illness. Paladin

WINNICOTT, D. Collected Papers. 1958. Tavistock

The Maturational Processes and the Facilitating Environment, 1965. Hogarth

The Family and Individual Development.

1965. Tavistock

Playing and Reality. Tavistock

BETTELHEIM, B. The Informed Heart. 1960. The Free Press

HOLBROOK, D. Human Hope and the Death Instinct. 1971.

Pergamon

WINNICOTT, D.W. Therapeutic Consultations in Child Psychiatry.

1971. D Hogarth

Audiovisual Methods of Teaching

Books and Sources

Published by The National Committee for Audio-Visual Aids in Education, 33 Queen Anne Street, London, W1M OAL.

A Catalogue of Recorded Sound for Education

Catalogues of Audiovisual Aids - Part 1 Religious Education English Modern Languages

Part 2 History
Social History
Social Studies

3 Economics
General
Physical and Economic
Geography

Part 4 Regional Geography

J.D. Turner "Introduction to the Language Laboratory"
Tony Gibson "Experiments in Television"

also the bi-monthly magazine "Visual Education" (which despite its title deals with all audio-visual media, apparatus and materials, as well as practical ideas and applications)

"A Survey of Overhead Projectors"

Published by Evans/Methuen Educational for the Schools Council:

"School Resource Centres\$ by Norman W. Beswick

Published by the Focal Press:

John Borwick "The Microphone Guide"

Ronald Hack "The Tape Editing Guide"

Joseph M Lloyd "The All-in-One Tape Recorder Book"

Pre-recorded Sound Tapes available from:

Sussex Tapes (The EP Group of Companies)
Bradford Road, East Ardsley, Wakefield Yorkshire WF3 2JN, England

Audio Learning Ltd., 24 Manor Court Aylmer Road, London N2

A.H. Crocker

Guidance Associates
Pleasantville, New
York, 10570

The British Council

(Contact your local

office)

The Open University
Milton Keynes England



BBC Enterprises 35 Marylebone High Street London W1A 1AA England

NB. This is only a partial list of material available in English. Consult the publications of the National Committee for Audio-Visual Aids in Education for more details of materials and equipment.

Equipment mentioned

Slide and film strip projector (full and half frame)

Rank Aldis Tuto II

Automatic half frame filmstrip projector

Bell and Howell Autoload 745

Cassette recorder

Sony TC 95 (with built-in microphone, automatic level control)

Philips N 2205

Philips N 2000 (playback only - battery operation)

Open reel tape recorder

Philips N 4308

Uher Variocord

Record Player

Dual P51

Film loop projector (NB. standard 8 Or Super 8)

Technicolor 610

(incorporated daylight screen)

Technicolor 260

(for projection onto a screen)

16 mm automatic sound film projector

Bauer P6

Overhead projector

Beseler Portascribe 15702 DYR



Other suggested equipment

White Board No3M Thermofax 'Secretary' heat stencil and transparency maker

Kodak Carousel automatic slide projector Kodak Instamatic slide making stand.

A SPECIAL ADDITIONAL REPORT ON THE TALKS by Dr. William Cooley on "INDIVIDUALIZED INSTRUCTION"

Dr. William Cooley is codirector of the University of Pittsburgh's Learning Research and Development Center. Since 1964, this Center has been working on:

- 1) The cognitive processes involved in the intellectual performances of children, and
- 2) The design of elementary school environments that are adaptive to individual differences.

Dr. Cooley led two sessions of the ISA Workshop on:

- 1) Individual differences; current research and Development, and
- 2) Evaluation of Educational change.

At these discussion sessions, the two topics were intermingled since both were involved with the work of the Research Center. This summary report therefore reflects the blending of the two sessions but should identify each topic sufficiently so that the reader can find references to each. The first portion will deal with individualized instruction, the last with evaluation of educational change.

PART. I: INDIVIDUALZED INSTRUCTION - Description of project at the Center

A. Aim of project

To design an elementary school environment in which the child can be guided in the process of learning by learning how to learn so he may become increasingly self-reliant in managing his educational program.



B. Definition of individualized instruction

That instruction which takes place when the teacher plans specific educational program goals and the means of attaining those goals for each of his pupils, taking into consideration the background and needs of each child. Instruction is individualized through the following action-reaction opportunities:

- 1. Teacher-pupil; 2. Pupil-pupil; 3. Small group discussion and project work:
- 4. Pupil interaction with A-V communication-access-response equipment; and pupil-older adult

C. Assumptions underlying the project

- 1. The learning of academic skills can be positively affected if the proper conditions are established and maintained.
- 2. The class-room environment can be modified to provide many micro-stimulations for pupil interaction of the ecologically adaptive response nature.
- 3. Computer as well as other cybernetic-type relationships can be designed to provide the teacher with information on each pupil's daily progress.
- 4. The teacher can plan an action-reaction program (not problem solving) for each of his pupils employing the concepts of a developmental cognitive strategy for learning.
- The teacher can specify and analyze educational goal outcomes into step-by-step learning sequences which lead to observable behavioral responses and/or measurable skill development.
- 6. The pupil can be motivated to accept the consequences of his action-reaction choices and to persist in his efforts to progress along his plan or program of learning tasks.

D. Elementary School environment and learning process

The classroom's educational climate and organizational structure is designed to provide the maximum number of instructional events which may be used by the teacher in guiding each child through his individualized program of opportunities to learn.



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The teacher also plans for each child to have a large number of opportunities to interact with other children, teacher-aids, laboratory equipment and automated equipment (A.V., microscopes, T.V., computer terminals etc.) in situations where the motivational climate of the experience is high. Special emphasis is placed on the action-reaction process of learning in which adaptive growth skills are stimulated and extended by the teacher who weaves a cognitive strategy of learning into each child's individualized educational program.

The teacher also plans for each child to have a large humber of opportunities to interact with other children.

The teacher's desire to show concern for the child's affective nature as well as his acquisition of skills is immensely supported by the readily available computer printouts and individualized work sheets showing the status of each child's progress along his path of learning. This continuous "feedback" on the pupil's skills development lets the teacher make more precise plans for the pupil and also gives him more time to talk with each child about his problems and progress.

E. Evaluation of Project at its present stage

The research project studied the use of the stimulation-response-feedback factor process in many classrooms in which children from the lower socio-economic level of the U.S.A. were being educated. These classrooms represented various environmental models of organization and were managed by a variety of teachers.

Ultimately the focus of the research was directed toward a detailed analytical study of the processes of learning specific skills. Observations of the classrooms in daily activity were made over a period of at least one year in two categories, each having two variables as follows:

- Pupil time spent in action-reaction activities,
 Variable A. Opportunities for interaction
 Variable B. Motivational aids; and
- 2. Efficiency of instruction (best use of time)

 Variable A. Structure of classroom organization

 Variable B. Number of instructional events.



Extensive statistical analysis and treatment of the data obtained from the observations of the variables in action plus pre-test and subsequent test scores on basic academic skills has led to the following results:

- 1. A research tool applicable to the measurement of basic academic skills was developed which can show the impact of an individualized instructional program on those skills by studying the stimulus-responsefeedback process occurring during the learning process.
- 2. In the classrooms having a student population of lower socio-economic level children increases of one grade level per year were made in the acquisition of academic skills when the individualized stimulation-response instructional event process was used.
- 3. Promising individualized instructional programs in selected academic skill areas have been published for use by the public. These programs are non-computer individualized instructional programs.

Implications for International Schools

Since international schools often have a large number of transient students, opportunities to improve the individualization of instructional programs should be welcomed. It would seem that the research project presented at our (ISA) Workshop has merit in that it shows how a teacher must plan for each child's educational path and how cybernetic type, i.e. feedback, information can bassist the teacher to guide the learner into an increasingly larger number of opportunities to participate in instructional events. Teachers in international schools who will experiment with this conceptual approach to individualized instruction will enrich their experience and survive the '70's'.

Reference: Toward the New Design of Adaptive Environments for Learning: Curriculum Aspects, a chapter in Individualized Instruction Delivery Systems, Chicago, Illinois, U.S.A.: National Society for the Study of Education. Publication date: 1975.



LEARNING RESEARCH AND DEVELOPMENT CENTER COMMERCIALLY AVAILABLE CURRICULA

INDIVIDUALIZED SCIENCE

Individualized Science (IS) is a nongraded, multimedia, self-contained science education program for students in grades 1 to 8. IS is individualized as to selection of learning activities, selection of content, and differences in learning style and pace. The program has five complementary goals: (1) student self-direction, (2) student co-evaluation, (3) affective, (4) inquiry, and (5) scientific literacy. Ten developmental levels, A through J, are included in IS, with each level leading to competencies under each goal. Levels A through D, now commercially available, cover processes of scientific inquiry and selected topics in biology, chemistry, and physics. Publisher: Imperial International Learning Corporation, Box 548, Kankakee, Illinois 60901.

IPI (INDIVIDUALLY PRESCRIBED INSTRUCTION) MATHEMATICS

IPI Mathematics—is a system of elementary mathematics that manages instruction so that each child's work can be evaluated daily and so that teachers can make assignments (prescriptions) for each child that are tailored especially for him/her. The curriculum is based on a continuum of 359 instructional objectives grouped into 10 learning areas: numeration/place value, addition/subtraction, multiplication, division, fractions, money, time, systems of measurement, geometry, and applications. As a student moves through the curriculum, she/he is constantly tested to determine his/her achievement of each instructional objective and to prevent repetition of already mastered skills. Publisher: Appleton-Century-Crofts, 440 Park Avenue South, New York, New York 10016.

PERCEPTUAL SKILLS CURRICULUM

The Perceptual Skills Curriculum is an individualized program for teaching children the basic perceptual abilities essential for success in elementary-school instructional programs in reading, arithmetic, handwriting, and spelling. It is a comprehensive, easily managed curriculum designed to detect and correct children's perceptual



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shortcomings before they can cause school failure. The program concists of 133 behavioral objectives paired with 133 criterion-referenced tests, four charts for recording student progress, and more than 1,800 correlated learning activities. The Perceptual Skills Curriculum is used as a year-long core program in preschool and kindergarten, and as a support to basal reading and arithmetic programs in grades 1 and 2. Publisher: Walker Educational Book Corporation, 720 Fifth Avenue, New York, New York 10019.

From Lynne Armstrong and Russell Hay, Geneva 22nd July, 1974.

ISA Workshop

The First International Schools Association Teachers! Workshop ended last Friday after two weeks of talks and discussions in Geneva. The organiser of the workshop stated that he was highly satisfied with the results and although there was some disagreement on how closely the theme of the workshop - Will your teaching survive the Seventies? - had been followed, the general feeting was that it had been a stimulating and worthwhile experience for the participants, teachers from schools all over the world.

One of the important points covered was the development and extent of acceptance by schools and universities of the International Baccalaureate. Mr. A.D.C. Peterson, Director General of the International Baccalaureate Office, addressed the workshop on the Theory of Knowledge course, and followed this by leading a general discussion for those unfamiliar with the I.B.

The I.B. was set up in the late 'sixties to provide an internationally acceptable school leaving qualification, especially for the mobile student population of the international and multinational schools, who, lacking a programme common to all schools, would have difficulty in maintaining continuity in their education. For administrative reasons at present it can only be taken in 25 schools, and there are more applying than can be accepted. Preference is being given to schools in developing countries and to state schools whose governments wish to experiment - as in Mexico where discussions are taking place to provide it for the new sixth form colleges which re, being set up.

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The I.B.O. is at present engaged in discussions with UNESCO, which may offer the I.B. as part of its services. Such a development would allow the I.B. to become far more widespread. Attainment of the I.B. has qualified students for places in more than 200 universities in 25 different countries, which indicates considerable success especially as the course is still in its introductory stage.

Another subject, dealt with at length by David Holbrook and Roger Poole, was the nihilism prevalent in our polluted culture, propagated by the 'New Hun', and the need to combat this if civilisation is to survive. An extremely interesting talk was given by Dr. Peter Lomas on the concurrence of aim in psycho-therapy and education, and one of the most relevant from the point of view of the participants was Graham Carey's expose of his ideas for a radical alternative to the present system of teacher training.

Acknowledgements

The compiler wishes to thank, in addition to the speakers at the Workshop and to leaders of discussion groups, those who made a very special contribution to the daily running of the Workshop. Those persons are:

Mr. Nick Carter, Headmaster, Senfor Primary Division, International School of Geneva.

Mr. Russell Cook, External Affairs Officer of ISA.

Dr. David Heinlein, Heddmaster, Rutgers Preparatory School, Wew Jersey, USA and Vice-Chairman of ISA

Professor Charles Merrifield, California State University, Hayward, USA and

Miss Esther Piette, Executive Assistant of ISA
Miss Claire Every, Secretary kindly put at our disposal by the
International Bureau of Education.

Documentation for the Workshop was kindly provided by the International Bureau of Education and by the International Baccalaureate Office.



This report was compiled by A.D. Campbell, Honorary Secretary of ISA.





CASSETTES OF TALKS BY SPEAKERS AT WORKSHOP

Cassettes of talks will be available, if there is sufficient demand, at a cost of 6 SF each (or equivalent in other currency).

Please indicate on the list of cassettes the ones you wish to purchase and return at once to ISA, CP 20, 1211 General 14, Switzerland.

HOLBROOK a. Children's Writing

b. The Need for Subjective Disciplines

c. The Poetry of Sylvia Plath

d. Cultural Pollution

POOLE a. The Transition School-University

b. The Teaching of Milton and Swift (Objective Ideals

and Subjective Realities)

c. Phenomenology (and Subjectivity)

PETERSON a. The Theory of Knowledge Course in the Inter-

national Baccalaureate

b. Integrated Courses in the Humanities

DEAN School Organization

THOMPSON Trends in the Teaching of Science

LOMAS The Concurrence of Aim in Psychotherapy and Educa-

tion

MERRIFIELD Social and Educational Philosophies, Some Curriculum

Implications

COOLEY a. Current Research and Development in Individualized

Instruction

b. The Evaluation of Educational Change

Signature:

School:

Address:

Date:

